# **AGENDA**

# Water and Wastewater Financing Board November 12, 2009 10:00 am

Room 31, Legislative Plaza

(6th Avenue between Charlotte Avenue and Union Street) Nashville, Tennessee

Call to Order

Approval of Minutes

December 18, 2008

September 10, 2009

Cases:

Town of Toone

Hardeman County

Town of Decaturville

**Decatur County** 

City of Paris

Henry County

Status:

City of Friendship

Crockett County

Compliance:

Miscellaneous:

Town of Surgoinsville proposed sewer system

**Hawkins County** 

Water Loss Schedule

Jurisdiction list

Next meeting

March 11, 2010

Open Discussion

Visitors to the Legislative Plaza are required to pass through a metal detector and must present photo identification. Individuals with disabilities who wish to participate in this meeting or to review filings should contact the Division of Local Finance to discuss any auxiliary aids or services need to facilitate such participation. Such contact may be in person or by writing, telephone or other means, and should be made prior to the scheduled meeting date to allow time to provide such aid or service. Contact the Division of Local Finance (Ms. Joyce Welborn) for further information

414 Union Street, Suite 1110 Nashville, TN 37243-1402 Telephone (615) 532-7204 Fax (615) 532-5232 Joyce, Welborn@tn.gov

# MINUTES of the

# WATER AND WASTEWATER FINANCING BOARD MEETING DECEMBER 18, 2008

10:00 a.m.

Chairperson Ann Butterworth opened the meeting of the Water and Wastewater Financing Board (WWFB) at Legislative Plaza, Room 31, Nashville, Tennessee.

Board members present and constituting a quorum:
Ann Butterworth, Chairperson, Comptroller Designee
Ken Pointer, Designee of Commissioner of Department of
Environment and Conservation (TDEC)
Grey Scott, Representative of Utility Districts
Ben Bolton, Representative of Manufacturing Interests
Shirley Fox Rogers, Representative of Municipalities
Kenneth Wiggins, Representative of Municipal Water Utility
Joseph Prochaska, Representative of Environmental Interests

# Staff present:

Joyce Welborn, Division of Local Finance--Comptroller's Office David Bowling, Division of Local Finance--Comptroller's Office Bill Case, Division of Municipal Audit—Comptroller's Office Bobby Lee, General Counsel—Comptroller's Office

### **PURPOSE OF MEETING**

Ms. Butterworth asked Ms. Welborn to explain the purpose of this meeting. Ms. Welborn stated that legislation was enacted in 2008 requiring the Comptroller to perform a rate study of municipal water and sewer systems. The study was to identify water and sewer rates and tap fees charged customers living within a municipality's city limits and those charged to customers living outside the city limits and determine if any charges made to the customers outside the municipal limits were justified at greater than 100% of those inside the limits. The University of Tennessee, Municipal Technical Advisory Services prepared the study at the request of the Comptroller. The comments of the Board concerning its review of the study are to be included in the report submitted to the Governor by January 1, 2009. Ms. Welborn stated that the study had been completed and that copies had been included in the Board packets. She stated that she had made a brief review of the study and had included some comments with regard to explanations given by the municipalities concerning any charges greater than 100%.

After a general discussion about the rate study, the Board proceeded to review each of the systems reported in the study. During this review, comments were

made regarding whether the inside/outside rate differences appeared reasonable or whether staff should request further information from systems whose differences appeared unreasonable.

Following the review of the rate study, the Board discussed the process for preparing the Annual Report for the Governor. Ms. Butterworth subsequently made a motion that (1) a copy of the rate study will be submitted with the Report; (2) a copy of the responses submitted by the municipalities explaining differences in their inside/outside rates will be submitted with the Report; (3) Ms. Welborn will prepare a draft of the Report to be forwarded to each member of the Board for their review; (4) members' comments will be submitted to Ms. Welborn who will make the preliminary revisions to the Report; and (5) the Chair is authorized to make final revisions and submit the completed Annual Report to the Governor without the necessity of calling a formal meeting of the Board to give final approval for the Report. Mr. Wiggins seconded the motion and it was approved.

Mr. Scott made a motion that the meeting be adjourned. Mr. Bolton seconded the motion and it was approved. The meeting adjourned at 12:30 p.m.

Respectfully submitted,

Ann Butterworth Chairperson

Joyce Welborn Board Coordinator

# **MINUTES**

of the

# WATER AND WASTEWATER FINANCING BOARD MEETING SEPTEMBER 10, 2009 10:00 a.m.

Chairperson Ann Butterworth opened the meeting of the Water and Wastewater Financing Board (WWFB) at Legislative Plaza, Room 31, Nashville, Tennessee.

Board members present and constituting a quorum:
Ann Butterworth, Chairperson, Comptroller Designee
Tom Moss, Designee of Commissioner of Department of
Environment and Conservation (TDEC)
Grey Scott, Representative of Utility Districts
Ben Bolton, Representative of Manufacturing Interests
Shirley Fox Rogers, Representative of Municipalities
Kenneth Wiggins, Active employee of a municipal water utility
Drexel Heidel, Active employee of a water utility district

# Staff present:

Joyce Welborn, Division of Local Finance--Comptroller's Office David Bowling, Division of Local Finance--Comptroller's Office Bill Case, Division of Municipal Audit, Comptroller's Office Bobby Lee, General Counsel—Comptroller's Office

### APPROVAL OF MINUTES

Mr. Scott made a motion to approve the minutes of November 13, 2008. Mr. Wiggins seconded the motion and it was approved.

### **STATUS CASE**

City of Millington: The City of Millington has reported a negative change in net assets for four consecutive years. The City presented a plan to the WWFB in July 2008 showing a rate increase of 35% over three years. Ms. Welborn introduced Mayor Richard Hodges and Finance Director Bruce Rasmussen. They stated that several changes have been made since the City appeared before the WWFB. A 10% rate increase was implemented in July 2009 and a 10% increase is projected in July 2010. The mayor requested relief from implementation of the WWFB-approved 35% rate increase. Additional revenues are being generated since the city applied the rates universally to all customers. This includes the US Naval Base which in the past had been charged a decreased rate due to its size and its initial infrastructure investment to the City. In the past, the city was not charged for water usage in its city buildings, but is now paying both water and sewer service. The mayor stated that he believes the next financial statements will reflect that the city is no longer in a financially distressed condition. After considerable comments and questions by the Board on the city's failure to implement the rate increase plan as previously approved by the WWFB, Mr. Wiggins made a motion to approve the plan of increases in water rates for the next 2 years and sewer rates over the next 3 years. Mr. Bolton seconded the motion and it was approved.

### **CASE STUDIES**

### Copper Basin Board of Public Utilities

Copper Basin has reported a negative change in net assets for at least five consecutive years. There has been some question whether Copper Basin is a county system or a utility district.

Previously, the financial statements were reflected as a component unit of Polk County so jurisdiction was in the Water and Wastewater Financing Board. In order to determine the standing of the entity, staff has met with the Polk County Executive and with the entity board. Representatives of TAUD have also met with the entity. The Polk County legislative body has taken action properly approving this as a utility district. Based on information received from the Copper Basin attorney, staff believes Copper Basin is a utility district and that this case should be transferred to the Utility Management Review Board for future action. Ms. Fox-Rogers made a motion to approve staff's recommendation to transfer the case to the UMRB. Mr. Scott seconded the motion and it was approved.

### 2009 Legislation

Since the next four cases were affected by the passage of Public Chapter 72 in early 2009 Ms. Welborn discussed that act which changed the criteria in determining systems which are reported to the Board as being financially distressed. Previously that was three consecutive years with negative change in net assets—the legislation reduced that to two consecutive years. It also eliminated the exemptions in place for municipal systems – the seven year window to "grow" the customer base, the debt to equity ratio, and the contributed capital exemption that was eliminated by change in accounting practice.

#### Town of Vonore

The Town of Vonore has not been before the Board previously because it met the statutory exemption criteria regarding debt/equity ratio. During the 2009 session of the legislature, that exemption authority was repealed. The Town has reported a negative change in net assets in the sewer system for three consecutive years. The Town purchases its water from the Tellico Area Service System. The Town has major infiltration and inflow problems, which it believes is due to major leaks in the TASS water lines. The last rate increase was effective in FY 06. Rates historically have been increased every three years. The Town has presented the following as a plan of action: 1) The Town is projecting a rate increase of 25% in October 2009 and will continue to review its costs annually and make rate adjustments accordingly; 2) The Town is discussing the possibility of TASS taking over the operation of the Town's system; 3) Commercial business may be charged a higher rate than residential customers; and 4) MTAS will be consulted for suggestions to improve the system's financial condition. Staff recommended the board endorse the Town's actions and that Town officials appear at the WWFB meeting in six months with positive results. Mr. Moss made a motion to approve staff's recommendation. Mr. Bolton seconded the motion and it was approved.

#### City of Milan

The City of Milan has also been previously exempt through application of the debt/equity ratio. That exemption was repealed. The City's annual financial statements have reported a negative change in net assets for two consecutive years. Rates were increased in July 2007 and July 2008. Ms. Welborn stated that the City indicated it would be receiving CDBG funding which would result in positive change in net assets. The Board discussed the fact that this would be a one-time inflow of funds and that the City could be in a distressed condition the following year. Ms. Fox-Rogers made a motion that staff advise the City of Milan with regard to the effect of the CDBG funding and that the financial distress condition may not be resolved. Mr. Bolton seconded the motion and it was approved.

### Town of Bulls Gap

The Town of Bulls Gap has reported a negative change in net assets for three consecutive years, but has been under the debt/equity ratio exemption. Ms. Welborn discussed a letter submitted by the Mayor of Bulls Gap explaining that the Town's General Fund is in a very good financial condition. Rather than raise sewer rates, they have annually included an

amount in their budget to be transferred from the General Fund to the Sewer Fund. They plan to continue including whatever amount is necessary to meet operating costs of the Sewer Fund. Staff recommends that the Board endorse the actions of the Town of Bulls Gap. Mr. Scott made a motion to accept staff's recommendation. Mr. Wiggins seconded the motion and it was approved.

#### Town of Gibson

The Town of Gibson has also been previously exempt through application of the debt/equity ration. That exemption was repealed. Ms. Welborn stated that the Town's annual financial statements have reported a negative change in net assets for at least five consecutive years. The Town has recently increased its monthly maintenance fee, which could possibly result in the Town being in compliance. However, the Town does not have its current audit completed. Staff recommends that the Board endorse the actions of the Town and continue to monitor the system's operations. Mr. Heidel made a motion to accept staff's recommendation. Mr. Bolton seconded the motion and it was approved.

### Systems in Compliance

Ms. Welborn reported that the Town of Petersburg, the City of Kenton and the City of Morristown are now in compliance.

#### MISCELLANEOUS ITEMS

## Other Cases Under WWFB Jurisdiction

Ms. Welborn stated that the Board package includes a schedule identifying other systems which are currently under the Board's jurisdiction.

### Water Loss Issues

Ms. Welborn stated that the Board package included a memorandum from Dennis Dycus describing the process his office will follow in reporting water losses to the Board. Ms. Welborn stated that Mr. Lee is continuing to work with the Attorney General's Office with regard to certain terms to be included in the water loss rules.

#### **Travel Regulations**

Ms. Welborn discussed changes in the state's travel regulations which are applicable to Board members.

#### Member List

Ms. Welborn stated that the current list of Board members is included in the Board package and will be on the Board's webpage on the internet.

## Next Meeting

Ms. Welborn stated that the next scheduled meeting is November 12, 2009.

Ms. Fox-Rogers made a motion that the meeting be adjourned. Mr. Wiggins seconded the motion and it was approved. The meeting adjourned at 11:30 a.m.

Respectfully submitted,

Ann Butterworth Chairperson

Joyce Welborn Board Coordinator

# WATER AND WASTEWATER FINANCING BOARD Case Study

Case: Town of Toone, Hardeman County

Mayor: Joseph Jones

Customers: 240 water; 89 sewer

Water Loss: unknown

The Town of Toone has been experiencing a negative change in net assets for at least the last five fiscal years in its water and sewer system according to the information contained in audited financial statements.

The water and sewer rates as shown in the June 2008 audit are:

Water rates residential	<u>Inside</u>	<u>Outside</u>
First 2,000 gallons	\$8.00	\$9.00
2,001 - 5,000	\$2.50	\$2.50
Over 5,000 gallons	\$1.50	\$1.75
<u>Kil</u>	gore Corporation	
First 1,250,000	gallons \$900.	00
All over per tho	busand \$ .	65
Kilgore also pays §	331,200 for depreciation and	nually
	Conver rotes	-

## Sewer rates

Residential flat rate \$10.00 Commercial per thousand \$1.50

The Town has 133 inside residential customers, eight inside commercial customers and two inside governmental customers. It also has 94 residential and three commercial customers outside the town limits. All sewer customers are inside the town limits – 79 residential, seven commercial and two governmental. The main industry, Kilgore Corporation (a maker of pyrotechnics- infrared flares - sold to American allies), has been in the Town for about 40 years. It is a water only customer with 400 to 500 employees at any given time. Kilgore has its own lagoon system for sewer treatment.

The following changes effective September 15, 2009 which will result in an increase in operating revenues of approximately \$49,000:

- 1. Residential water revenue will increase approximately six percent.
- 2. Sewer revenue will increase approximately 68%.
- 3. Kilgore Corporation will be charged both for volume used and a surcharge. In the past, they have only been charged for one item or the other. The total increase for them is approximately 78%.
- 4. The Town is also implementing a cost of living increase in 2011 and 2012.
- 5. The Town Hall and other town facilities will now be metered and billed.
- 6. The Town will also begin paying a fire hydrant maintenance fee of \$2,500 annually.
- 7. The connection fee of \$40 and reconnection fee of \$50 have been increased to \$60 each.
- 8. On October 22, 2009, the Mayor called and said that revenues had increased \$4,000 since the rate increase.

Since Mayor Jones took office, many other changes have taken place:

- 1. The Town has a contract with a water tank maintenance company for its three tanks. It is currently renegotiating that contract to reduce expenses.
- 2. A Certificate of Deposit matured and the proceeds were applied to the outstanding debt, thereby decreasing interest expense.
- 3. The cut off policy is now strictly enforced.
- 4. The bookkeeping is now done "in-house."
- 5. MTAS has been used many times to assist the Town in areas related to finance, rates, policies, legal issues, etc.
- 6. The lagoon is filling up and will soon create major expense. The City of Bolivar gave the Town an aerator for use at the lagoon, so electricity will have to be run to the area. The aeration of the lagoon will delay the expense hopefully long enough that the Town can accumulate the funds to pay for the necessary upgrades or changes.

The current returned check fee is \$20 and staff has recommended that they consult with their attorney or MTAS to change the amount to comply with the state allowance of \$30.

No water loss schedules have been filed. Staff recommended that immediate action be taken in order to comply with State law.

Staff recommends that the Board endorse the actions of the Town of Toone and continue to monitor it until compliance is reached.

		A personal designation of the second		Town	Town of Toone	•				
				HIST	HISTORY FILE			Müdeleidi kiriler eşer manayınan aşındırın mestan eldiği İmdeleidi ildiği		
		Audited		Audited		Audited	Ā	Audited	4	Audited
Fiscal Year 6/30		2004		2005		2006	- 4	2007		2008
Water/sewer revenues	₩	82,141	₩	88,077	₩.	95,670	\$	110,059	-	111,017
Kilgore surcharge	₩	ı	₩	28,600	₩	13,000	₩	3,553	₩	3,553
Other revenues	₩	9,490	₩.	8,950	₩	5,988	8	2,228	-	4,947
Total Operating Revenues	₩	91,631	₩	125,627	4	114,658	₩	115,840	₩.	119,517
Total Operating Expenses	₩	117,959	₩	136,028	₩.	131,219	₩.	146,732	49	123,659
Operating Income	₩	(26,328)	₩	(10,401)	₩	(16,561)	₩	(30,892)	49	(4,142)
Interest Expense	₩.	7,249	8	7,163	₩.	5,313	\$	6,979	8	6,880
Change in Net Assets	₩	(33,577)	₩.	(17,564)	₩.	(21,874)	₩.	(37,871)	₩.	(11,022)
Supplemental Information										
Principal payment	₩.	1,763	49	1,848	<del>0</del>	3,699	49	2,033	8	2,132
Depreciation	₩	48,932	₩	49,196	₩	48,682	₩	48,682	₩	36,790
Water Rates										
Residential/Sm. Commercial	-				Residentia	ıtial	Residentia	lei	Residentia	ıtial
First 2,000 gallons inside	₩	7.00	49	7,00	49	8.00	₩	8,00	49	8.00
First 2,000 gallons outside	4	8.00	₩	8.00	₩	9.00	8	00.6	₩	9.00
2,001 - 5,000 gallons both	w	2.00	49	2.00	₩.	2.50	8	2.50	₩	2.50
over 5,000 gallons	₩	1.25	₩	1.25	₩	1.50	₩.	1.50	₩.	1.50
over 5,000 gallons outside					\$	1.75	₩	1.75	₩	1.75
					Ε	Comm/Cty View	SES	Comm/Cty View	Sa	Comm/Cty View
First 2,000 galllons					49	10.00	4	10.00	₩.	10.00
2,001 - 5,000 gallons					₩	2.50	₩	2.50	₩	2.50
over 5,000 gallons					₩	1.50	↔	1.50	↔	1.50
Toone School										
First 8,000 gallons	₩.	30.00	₩	30.00	↔	50.00	₩	50.00	↔	50.00
8,001 - 20,000 gallons	₩	1.50	₩	1.50	₩	2.00	₩.	2.00	8	2.00
over 20,000 gallons	₩	1.00	₩	1.00	↔	1.25	₩	1.25	₩	1.25
Kilgore Corporation										
First 1,250,000 gallons	₩	900.00	₩	900.00	₩	900.00	₩.	900.00	₩	900.006
All over	₩	0.65	₩	0.65	₩	0.65	₩	0.65		0.65
					add dej	add \$31,200 for depreciation	add \$. depr	dd \$31,200 for depreciation	add s dep	dd \$31,200 for depreciation
Sewer Rates	-	6 4							-	
	S	10.00	S	10.00	₩	10.00	₩	10.00	₩.	10.00
Commercial per 1000 gallons	₩	1.50	₩	1.50	₩	1.50	₩.	1.50	₩	1.50
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Customers - Sewer	HOSE OF THE SECOND				name of the second seco		Management of the Company of the Com	***************************************		85

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				Projections	tio	25		energianistische deutsche meinergien mit der deutsche deutsche deutsche deutsche deutsche deutsche deutsche de			-	
				%0		Growth rate	5	Growth rate	9	Growth rate	B	Growth rate
	Audited	Pre	Projected			Projection	۵	Projection	۵	Projection	٥	Projection
Fiscal Year 6/30	2008		2009			2010		2011		2012		2013
Water/sewer revenues	\$ 111,017	₩	111,017		₩	111,017	₩	111,017	₩	111,017	₩	111,017
Kilgore surcharge	\$ 3,553	8	3,553		₩	3,553	₩	3,553	₩	3,553	₩	3,553
Other revenues		₩.	4,947	Contain and the special contains and the speci	₩	4,947	₩	4,947	₩	4,947	₩	4,947
Projected increase				17%	<del>v</del>	18,873	₩.	18,873	₩.	18,873	₩	18,873
Total Operating Revenues	\$ 119,517	40	114,570		₩.	138,390	₩.	138,390	₩.	138,390	₩.	138,390
Total Operating Expenses	\$ 123,659	₩.	127,369	3%	₩	131,190	₩	135,126	*	139,180	49-	143,355
Operating Income		₩.	(12,799)		\$	7,200	\$	3,264	₩	(790)	\$	(4,965)
Interest Expense	\$ 6,880	₩.	6,776			\$6,667		\$6,552		\$6,432		\$6,307
Change in Net Assets	T)		(19,575)		4	533	₩.	(3,288)	₩	(7,222)	₩.	(11,272)
Supplemental Information										material designation of the state of the sta		
Principal payment		₩	2,236		₩.	2,345	₩.	2,460	₩	2,580	₩	2,705
Depreciation	\$ 36,790	₩.	36,790		₩.	36,790	₩	36,790	₩	36,790	₩	36,790
Water Rates												
Residential/Sm. Commerci/Residential	Residential											
First 2,000 gallons inside	\$ 8.00											
First 2,000 gallons outside												
2,001 - 5,000 gallons	\$ 2.50											
over 5,000 gallons												
over 5,000 gallons outside	\$ 1.75											
	Sm Comm/Ct	<u>√C</u> ty View										
First 2,000 galllons	\$ 10.00											
2,001 - 5,000 gallons	2.											
over 5,000 gallons												
Toone School												
First 8,000 gallons												
8,001 - 20,000 gallons	\$ 2.00											
over 20,000 gallons												
Kilgore Corporation												
First 1,230,000 gallons	\$ 900.00											
All over	\$ 0.65											
	add \$31,200											
	depreciation											
Sewer Rates												
Residential flat rate	\$ 10.00											
Commercial per 1000 gallons	\$ 1.50											
Customers - Water												
		-		Age of the latest desirable desirabl								

Toone Water and Sewer Review
June 2009
Rate increase 2; effective Oct. 1, 2009
no volumes on minimum

year ending June 30  Operating Revenues	2006 Audit	2009 pre estimated	2010 project	2011 project	2012 project
Sales and user fees	95,670	64,869	16,379		
increase base Oct. 1,2009			24,588	32,784	29,206
Volume charge of \$2.00 per 1000 Cost of Living on volume July 1, 2010 (example 3%)			27,992	37,323 1,120	37,696 1,131
sewer user fees		13,759	3,440	4 000	47.000
increase base Oct. 1,2009			13,500 6,200	18,000 8,267	17,820 8,350
Volume charge of \$2.50 per 1000 Cost of Living on volume July 1, 2010 (example 3%)			6,200	248	250
Kilgore surcharge	13,000	42,640	10,660		
Kilgore surcharge increase Oct. 1			39,000	52,000	52,000
Variable rate from \$0.65 to \$1.00 per thousand			26,292	35,056 1,052	35,407 1,062
Cost of Living on volume July 1, 2010 (example 3%) Late Peanlty			1,106	1,106	1,106
Water connection			1,500	1,500	1,500
Water tap fee			2,796	2,796	2,796
other (late fees, tap fees, 2009) Reconcer fees	1,396	5,904	200		
fire hydrant maintenance fee			2,500	2,500	2,500
City services water and sewer			648	667	687
total operating revenues	110,066	127,172	176,601 (	191,251	188,324
Operating Expenses					
pumping and lift stations	38,777	14,730	15,172	15,627	16,096
Purfication and disposal	4,031	9,287	9,566	9,853	10,148
Transmisson and collection	28,107	76,271	78,559√	,	83,343
customer accounting and collection	10,434	6,613	6,811		7,226
administation and general	1,188	8,448	8,701	8,962	9,231
operating expenses without depreciation		115,349	118,809	122,374	126,045
depreciation	48,682	49,111	49,111	49,111	49,111
Total operating expenses	131,219	164,460	167,920	171,485	175,156
total operating Income (Loss)	(21,153)	(37,288)	8,681	19,767	13,168
Nonoperating revenue expenses)					
Interest income	4,592	4,592	4,592	4,592	4,592
Interest expense	(5,313)	(6,776)	(6,667)	(6,552)	(6,432)
Total nonoperating revenue (expenses)	(721)	(2,184)	(2,075)	(1,960)	(1,840)
Change in net assets	(21,874)	(39,472)	-6,606 €,800	17,807	11,328

# ORDINANCE NUMBER \_\_\_\_\_

# AN ORDINANCE OF THE TOWN OF TOONE SETTING WATER AND SEWER RATES

**BE IT ORDAINED** by the board of Mayor and Aldermen of the Town of Toone, Tennessee as follows:

**Section 1: Schedule of rates**. The rates to be charged each user or consumer of water and sewer per month shall be as follows:

# Water charges:

•	Outside town limits base:	5/8" meter:	\$11.00
•	Outside town limits base:	2" meter	\$85.00
•	Outside town limits base:	6" meter	\$4,240.00
•	Inside town limits base:	5/8" meter	\$10.00
•	Inside town limits base:	2" meter	\$80.00
•	Inside town limits base:	6" meter	\$4,240,00

Cost per thousand gallons for all consumers except industrial: \$2.00
Cost per thousand gallons for industrial consumers: \$1.00

# Sewer charges:

•	Residential/Institutional base:	5/8" meter	\$15.00
•	Commercial base:	5/8" meter	\$20.00
•	Institutional base:	2" meter	\$80.00

Cost per thousand above base is \$2.50.

**Section 2:** All ordinances, resolutions or parts of ordinances and resolutions in conflict herewith are to the extent of such conflict hereby repealed.

Section 3: This ordinance shall take effect September 15, 2009, the public welfare requiring it.

Passed First Reading Passed Second Reading

Attest:

Town Recorder

# WATER AND WASTEWATER FINANCING BOARD Case Study

Case: Town of Decaturville, Decatur County

Mayor: Jerry Buchanan Customers: 897 water; 368 sewer

Water Loss: 32.44%

The Town of Decaturville has been experiencing a negative change in net assets for at least the last three fiscal years in its water and sewer system according to the information contained in audited financial statements.

The water and sewer rates as shown in the June 2008 audit are:

Water rates	<u>Inside</u>	<u>Outside</u>
Minimum bill (1,500 gallons)	\$10.40	\$14.21
Next 2,000 gallons	\$ 4.33	\$ 6.03
Next 5,000 gallons	\$ 2.37	
All over	\$ 2.32	\$ 3.61
Sewe	er rates	
First 1,500 gallons	\$ 7.6	57
All over	\$ 4.4	43

As of July 2009, the minimum water bill was increased to \$7.00, which is projected to generate approximately \$64,000 in additional revenue. The water rates for usage over 3,500 gallons were eliminated. There are no sewer customers outside the town limits. In July 2008, the Town discontinued use of their water plant. All water is now purchased from the City of Parsons under a ten year contract for \$2.05 per thousand gallons. The audit ending June 30, 2009 will reflect a write off of the water plant. Since the plant will be written off, depreciation expense will be greatly reduced. Town officials believe that this will result in a large monetary saving.

Information regarding the actual amount of the plant to be written off and the decrease in the depreciation expense is not available at this time.

The cut off policy was recently changed from 90 days to 60 days and is now strictly enforced. There appear to be a large amount of renters leaving the system without payment. It is possible that an even stricter policy could be implemented or that a renter's deposit could be implemented.

It was suggested that the Town review its \$500 tap fee to ensure that it is adequate.

The Town started a meter replacement program in early spring 2009 beginning with the meters that register over 1,000,000 gallons of usage. The Mayor's meter was the first one changed. City Hall and other facilities are now metered and billed.

Staff recommends that the Board endorse the actions of the Town of Decaturville and continue to monitor it until compliance is reached.

		n of Decatur				
	I	ISTORY FII				
		Audited		Audited		Audited
Fiscal Year 6/30		2006		2007		2008
Water/sewer revenues	\$	350,149	\$	351,332	\$	392,989
Other revenues	\$	34,724	\$	32,098	\$	26,145
Capital contributions	\$	34,227				
Total Operating Revenues	\$	419,100	\$	383,430	\$	419,134
Total Operating Expenses	\$	419,813	\$	455,603	\$	519,328
Operating Income	\$	(713)	\$	(72,173)	\$	(100,194)
Interest Expense	\$	28,697	\$	21,413	\$	14,719
Change in Net Assets	\$	(29,410)	\$	(93,586)	\$	(114,913)
Supplemental Information				***************************************		
Principal payment	\$	82,697	\$	84,416	\$	85,957
Depreciation	\$	105,310	\$	107,259	\$	110,326
Water Rates					<b>-</b>	
Inside 3/4" meter	<b>-</b>		ļ			
First 2,000 gallons	\$	10.40	\$	10.40		
First 1,500 gallons	+-	10.10	Ψ	10.40	\$	10.40
next 2,000 gallons	\$	4.33	\$	4.33	\$	4.33
next 5,000 gallons	\$	2.37	\$	2.37	\$	2.37
All over	\$	2.32	\$	2.32	\$	2.32
Outside 3/4" meter	<b>T</b>		T			
First 2,000 gallons	\$	14.21	\$	14.21		
First 1,500 gallons	T		7	- 111	\$	14.21
next 2,000 gallons	\$	6.03	\$	6.03	\$	6.03
All over	\$	3.61	\$	3.61	\$	3.61
Water customers	<u> </u>	878	<del></del>	878	τ	897
Water Loss			<u> </u>			32.44%
Sewer Rates	Insid	le/outside	Insid	de/Outside	Insid	le town
First 2,000 gallons	\$	7.67	\$	7.67		
First 1,500 gallons			<u> </u>		\$	7.67
All over	\$	4.43	\$	4.43	\$ \$	4.43
			<del></del>	**************************************		side town
First 1,500 gallons					\$	14.21
next 2,000 gallons				***************************************	\$	6.03
All over					\$	3.61
Sewer customers		358		358		368

## Audited 2008  enues \$ 392,989	9200 2006 392 36 26 6 419, 6 534, 7 (115 15 15 (130,	Projections  0% Gro  8  40% \$  3% \$  3% \$  \$	Projections         ted       O% Growth rate         99       \$ 392,989         ,145       \$ 26,145         40%       \$ 157,196         134       \$ 576,330         213       3%       \$ 550,239         ,079       \$ 26,090         ,296       \$ 12,696         375       \$ 13,394         376       \$ 13,394	<del>ωωωωωωωωωωωωωωωωωωωωωωωωωωωωωωωωωωωω</del>	Growth rate Projection 2011 392,989 26,145 157,196 576,330	Gr.	Growth rate Projection 2012	0.00	Growth rate
Audited 2008  S \$ 392,989  rease \$ 26,145  rease \$ 149,134  the sea sea sea sea sea sea sea sea sea se	Projected 2009 392,989 26,145 419,134 419,134 534,213 (115,079) 15,296 (130,375)		8 55 1 1 2 2 C	<del>ω</del> <del>ω</del> <del>ω</del> <del>ω</del> <del>ω</del> <del>ω</del> <del>ω</del> <del>ω</del>	roych rate rojection 2011 392,989 26,145 157,196 576,330	<b>14</b>	ojection 2012	<b>15</b>	wth rate
Audited  2008  \$ \$ 392,989  Frease Fr	2009 392,989 26,145 419,134 419,134 534,213 (115,079) 15,296 (130,375)		200 200 100 100 100 100 100 100 100 100	<del>ω ω ω ω</del> ω ω	2011 2011 392,989 26,145 157,196 576,330	٩	ojection 2012	P	niection
2008  S	2009 392,989 26,145 419,134 534,213 (115,079) 15,296 (130,375)				2011 392,989 26,145 157,196 576,330		2012		
rease	392,989 26,145 419,134 534,213 (115,079) 15,296 (130,375)				392,989 26,145 157,196 <b>576,330</b>		207 080		2013
rease	26,145 419,134 534,213 (115,079) 15,296 (130,375)				26,145 157,196 <b>576,330</b> <b>566,747</b>	₩	736,207	₩	392,989
rease	419,134 534,213 (115,079) 15,296 (130,375)				157,196 <b>576,330</b> <b>566,747</b>	₩	26,145	₩	26,145
tenues \$ 419,134  lenses \$ 519,328  \$ (100,194)  \$ 14,719  ts \$ (114,913)  ts \$ (114,913)  \$ \$ (114,913)  \$ \$ (114,913)  \$ \$ (114,913)  \$ \$ (114,913)  \$ \$ (114,913)  \$ \$ (114,913)  \$ \$ (114,913)  \$ \$ (114,913)  \$ \$ (114,913)  \$ \$ (114,913)  \$ \$ (114,913)  \$ \$ (114,913)  \$ \$ (114,21)  \$ \$ (1					576,330	₩	157,196	₩	157,196
## \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$					566,747	4	576,330	₩	576,330
\$ (100,194) \$ 14,719 \$ (114,913) \$ \$ 110,326 \$ 110,326 \$ 110,326 \$ 2.37 \$ 2.37 \$ 2.37 \$ 2.37 \$ 2.37 \$ 4.33 \$ 5 6.03		Ψ		+		•	583,749	w	601,261
ts \$ 14,719 ation \$ 85,957 \$ 110,326 \$ 110,40 \$ 4.33 \$ 2.37 \$ 2.37 \$ \$ 2.37 \$ \$ 6.03 \$ \$ 5.03					9,583	₩	(7,419)	₩	(24,932)
ts \$ (114,913)  ation \$ 85,957 \$ 110,326 \$ 4.33 \$ 2.37 \$ 2.37 \$ 5 2.37 \$ 6.03 \$ 5 5.35				-	\$9,781	-	\$6,745	-	\$3,391
\$ 85,957 \$ 110,326 \$ 10.40 \$ 4.33 \$ 2.37 \$ 2.37 \$ 14.21 \$ 6.03 \$ 5.61				A	(198)	4	(14,164)	₩	(28,323)
\$ 85,957 \$ 110,326 \$ 10.40 \$ 4.33 \$ 2.37 \$ 2.32 \$ 14.21 \$ 6.03 \$ 5.61			-						
\$ 110,326 \$ 10.40 \$ 4.33 \$ 2.37 \$ 2.32 \$ 14.21 \$ 6.03 \$ 3.61	\$ 79,944	<del></del>	-	-	86,975	49	88,135	49	94.613
\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$ 110,326	₩.	-	₩.	110,326	4	110,326	₩	110,326
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			der blokken der						
Water customers 897			AND THE PROPERTY OF THE PROPER		e en				
Water Loss 32.44%			And the control of th						
Sewer Rates Inside town									
First 1,500 gallons \$ 7.67									
All over \$ 4.43									
Outside town									
First 1,500 gallons \$ 14.21									
next 2,000 gallons \$ 6.03			And the state of t						
All over \$ 3.61									
Sewer customers 368									

# WATER AND WASTEWATER FINANCING BOARD Case Study

Case: City of Paris, Henry County

Mayor: Sam Tharpe City Manager: Jack Tarkington Customers: 4,400 sewer

The City of Paris has been reported to the Board as having a negative change in net assets for at least six consecutive years in its sewer system according to the information contained in audited financial statements. Since the system is debt free, it has previously had an exemption from the jurisdiction of the Board.

The Paris Board of Public Utilities operates separate from the elected city board. The Mayor appoints all five members of the Board – one of which has to be a City commissioner. The Board recommends changes in the rate structure to the City Commission, which approves or denies the changes.

Effective August 1, 2009, the rates were increased by approximately 50%. The last rate adjustment prior to that was in August 2005. That increase was approximately 60%. Those rates had been in effect for 20 years. The average bill (4,000 gallons) will increase from \$14.08 to \$21.10. A "cap" which had been in place for the sewer system was eliminated effective in September. The rates include an operation and maintenance user charge of \$0.82 per thousand gallons. Of that charge, the City gets \$0.12 for future sewer expansion.

The system and plant need approximately \$3,000,000 worth of improvements. Even though sales are down 11% from last year, the revenue from the rate change will generate approximated \$30,000 per month.

As reflected, the City does not increase its rates very often, but is not opposed to making a significant adjustment.

Staff recommends the Board endorse the actions of the City of Paris.

	9			CITY	CITY OF PARIS	ARIS					- Company	amery and a supplemental supple
				HISTORY	FILE	HISTORY FILE - SEWER						
		alle Proprieta de la companya de la										
		Audited	-	Audited		Audited		Audited		Audited		Audited
Fiscal Year ending June 30		2004		2005		2006		2002		2008		2009
Sewer revenues	₩	1,078,987	₩.	1,070,049	\$	1,267,218	₩	1,265,612	₩	1,223,441	₩.	1,149,832
Other revenues	49	1,904	₩	1,688	₩.	1,735	₩	9,823	₩	7,137	₩	2,611
Total Revenues	40	1,080,891	₩	1,071,737	₩.	1,268,953	49	1,275,435	₩	1,230,578	₩	1,152,443
					-							
Total Operating Expenses	₩.	1,276,337	49	1,297,776	₩	1,307,087	₩.	1,440,258	49	1,355,672	₩	1,460,307
Operating Income	₩	(195,446)	₩	(226,039)	₩	(38,134)	₩	(164,823)	₩	(125,094)	₩	(307,864)
Interest Expense	₩	ı	₩	1	₩	1	₩.	ı	₩	1	₩	ŧ
Capital contributions							₩	52,808	₩	40,656	₩	45,629
Change in net assets	₩	(195,446)	₩	(226,039)	₩	(38,134)	₩	(112,015)	₩	(84,438)	₩	(262,235)
Supplemental Information												
Depreciation	₩	270,042	₩.	270,781	4	271,426	₩.	273,092	₩	259,407	₩	276,846
								And the second s	***************************************			
Sewer rates	1											
First 2,000 gallons	₩.	6.27	₩	6.27	€	9.14	₩	9.14	₩	9.14	₩	9.14
2,001 - 5,000 gallons	₩	1.37	₩	1.37	↔	2.47	₩	2.47	₩	2.47	₩	2.47
5,001 - 25,000 gallons	₩.	1.12	₩	1.12	₩	2.17	₩	2.17	₩	2.17	₩	2.17
over 25,000 gallons	₩	0.87	₩	0.87	₩	1.87	₩	1.87	₩	1.87	₩	1.87
customers												
All users/customers residing outside the corporate limits are charged an additional 50% of the commodity charge	side t	he corporate li	mits	are charged	an ac	dditional 50%	of th	e commodity (	charç	je		
Each sewer customer is charged an additional \$0.70 per thousand gallons as an operation and maintenance user charge	an ac	Iditional \$0.70	per	thousand gal	lons	as an operatio	n an	d maintenance	asn a	r charge	:	

				O	City of Paris	Paris			жа <del>новическа поставления в по</del>				
					Projections	ions							
					%0		Growth rate	0	Growth rate		Growth rate		Growth rate
		Audited		Projected			Projection		Projection		Projection		Projection
Fiscal Year ending June 30		2009		2009	and the second s		2010		2011		2012		2013
Sewer revenues	₩.	1,149,832	₩	1,149,832		₩	1,149,832	₩.	1,149,832	49	1,149,832	₩	1,149,832
Other revenues	₩.	2,611	₩	2,611		₩	2,611	₩	2,611	₩	2,611	₩	2,611
					35%	₩	402,441	₩	402,441	₩.	402,441	₩	402,441
Total Revenues	4	1,152,443	4	1,152,443		₩.	1,554,884	₩	1,554,884	₩	1,554,884	₩.	1,554,884
Total Operating Expenses	40	1,460,307	4	1,504,116	3%	₩.	1,549,239	₩	1,595,717	₩.	1,643,588	₩.	1,692,896
Operating Income	\$	(307,864)	₩	(351,673)		₩	5,645	₩	(40,832)	₩	(88,704)	₩	(138,012)
Interest Expense	₩	*	40-	ŧ			0\$		\$0		0\$		0\$
Capital contributions	\$	45,629											
Change in net assets	₩.	(262,235)	40	(351,673)		₩	5,645	•	(40,832)	₩.	(88,704)	₩.	(138,012)
Supplemental Information													
Depreciation	\$	276,846	₩	276,846		₩	276,846	₩	276,846	₩	276,846	₩	54,983
Sewer rates		TO COLOR OF THE PROPERTY OF TH											
First 2,000 gallons	₩.	9.14											
2,001 - 5,000 gallons	₩.	2.47											
5,001 - 25,000 gallons	₩.	2.17											
over 25,000 gallons	₩.	1.87											
customers													
All users/customers residing outside the corporate limits are charged an additional 50% of the commodity charge	de the cor	rporate limits are	char	ged an addition	al 50% o	of the	commodity cha	-ge					
Each sewer customer is charged an additional \$0.70 per thousand gallons as an operation and maintenance user charge	n additior	nal \$0.70 per tho	nsan	d gallons as an o	operation	n and	maintenance us	er ch	arge				
	CONTRACTOR OF THE PROPERTY OF THE PERSON OF	TOTAL STREET,		STREET,			WINDOWS STATES AND STA			-	COCCUPATION OF THE PROPERTY OF	CONTROL OF	MANAGEMENT AND ADDRESS OF THE PROPERTY OF THE



# City of Paris, Tennessee

100 N. Caldwell • P.O. Box 970 • Paris, Tennessee 38242 Ph. (731) 641-1455 • Fax (731) 641-1424 Email: cityofparis@cityofparistn.gov

October 23, 2009

Joyce Welborn Water & Wastewater Financing Board 410 Union Street Suite 1110 Nashville, TN 37243-1402

RE: Paris BPU wastewater finances

Dear Ms. Welborn:

This letter will serve as written documentation of the information provided to you at the meeting in Paris on Monday, October 19, 2009. The Paris Board of Public Utilities (BPU) provided you with a rate schedule showing the current wastewater rate structure which went into effect on August 1, 2009. Part of the rate increase was in the form of fixed charges while the remainder of the increase was placed in consumption charges. An average BPU customer using 4,000 gallons per month has seen their bill increase from \$14.08 to \$21.10 per month. The old rate schedule that had been in effect since August 1, 2005 was also presented for comparison purposes.

The September 2009 income statement was presented showing projected revenues and expenses for fiscal year 2009-2010. BPU is projecting around \$470,000 more revenue than in fiscal year 2008-09. Net income for the year is projected at \$196,800. So far this year, sales are down by 11% causing BPU to think that budget projections may not be fully reached. We remain confident though that the rate increase is substantial enough to correct the negative change in net assets even with decreased sales.

The city of Paris and the Board of Public Utilities appreciate the opportunity to meet with you and provide information on how the wastewater financial situation is being addressed. If you have questions or need more information, please give us a call. We are eager to help in any way we can.

Sincerely,

Jack Tarkington City Manager

# BOARD OF PUBLIC UTILITIES PARIS, TENNESSEE

# RESIDENTIAL WASTEWATER RATE SCHEDULE

Effective AUGUST 1, 2009

# **AVAILABILITY**

Available to all residential customers within the Corporate City Limits of Paris.

# **COMMODITY RATE**

Water Usage	Wastewater Rate*	<i>√</i> å
Less Than 1,000 Gallons 1,000 Gallons 2,000 Gallons	\$11.60 (Base Charge) \$13.15 Charge \$14.70 Charge	UF (12.33 + .82 = 13.15) (13.06 + 1.64 = 14.70)
Next 3,000 Gallons Next 20,000 Gallons Over 25,000 Gallons	\$3.20 per Thousand Gallons \$2.90 per Thousand Gallons \$2.60 per Thousand Gallons	

All users or customers residing outside of the corporate limits of the City of Paris shall be charged an additional fifty percent (50%) of the wastewater bill.

# MINIMUM MONTHLY BILL BASED ON WATER METER SIZE

<u>Size</u>	Inside City	Outside City
5/8"	\$11.60	\$17.40
1"	\$19.18	\$28.77
1 1/2"	\$41.30	\$61.95
2"	\$73.93	\$110.90

### RESIDENTIAL SPRINKLER CREDIT

The maximum usage for the summer meter reading months of June - October will be the maximum usage during the previous meter reading months of November - May.

#### **PAYMENT**

All charges are net.

<sup>\*</sup>Rates include an Operation and Maintenance User Charge of \$0.82 per thousand gallons.

# PARIS BOARD OF PUBLIC UTILITIES PARIS, TENNESSEE

# **NON-RESIDENTIAL WASTEWATER RATE SCHEDULE**

Effective AUGUST 1, 2009

#### **AVAILABILITY**

This rate schedule shall apply to wastewater service to commercial, industrial, governmental, and other customers not classified as residential, located within the corporate limits of the City of Paris. The rate is based upon the amount of water measured by the Board of Public Utilities' metering facilities at each point of delivery.

# **COMMODITY RATE**

Water Usage	Wastewater Rate*
Less Than 1,000 Gallons	\$12.40 (Base Charge)
1,000 Gallons	\$13.95 Charge
2,000 Gallons	\$15.50 Charge
Next 3,000 Gallons	\$3.35 per Thousand Gallons
Next 20,000 Gallons	\$3.05 per Thousand Gallons
Over 25,000 Gallons	\$2.70 per Thousand Gallons

All users or customers residing outside of the corporate limits of the City of Paris shall be charged an additional fifty percent (50%) of the wastewater bill.

# Surcharge

Biochemical Oxygen Demand (BOD) over 250 mg/l	\$0.10 per pound
Suspended Solids over 300 mg/l	\$0.05 per pound
Ammonia Nitrogen over 15 mg/l	\$0.70 per pound

### Surveillance Fee

Any customer issued an industrial pretreatment discharge permit shall be charged an additional \$1,000.00 per month.

# MINIMUM MONTHLY BILL BASED ON WATER METER SIZE

<u>Size</u>	<b>Inside City</b>	<b>Outside City</b>
5/8"	\$12.40	\$18.60
1"	\$20.32	\$30.48
1 1/2"	\$43.92	\$65.88
2"	\$78.44	\$117.66

### **PAYMENT**

All charges are net.

<sup>\*</sup>Rate includes an Operation and Maintenance User Charge of \$0.82 per thousand gallons.

# WATER AND WASTEWATER FINANCING BOARD Status Report

Case:

City of Friendship, Crockett County

Mayor:

Casey Burnett

Customers:

345 water, 278 sewer

The City of Friendship has been reported to the Board as having a negative change in net assets for at least five years in its water system and two years in its sewer system according to the information contained in audited financial statements.

All customers of the system pay the same water rates, but the sewer rates have residential and commercial rates as follows:

	<u>Water rates</u>	Sewer rates
0-3,000 gallons/residential	\$17.50	\$17.50
0-3,000 gallons/commercial		\$25.00
Over 3,000 gallons	\$ 4.00	\$ 4.00

The residential sewer rate has a maximum charge of \$25.00 per month.

The entire water system has been replaced except for those lines in the middle of town. A grant is in the works to replace those lines. The City has one plastic molding industry (year-round operation), one cotton gin (operating only in the fall), and less than 25 other small businesses. The remaining customers are residential. The gin also has a metered selling point for water primarily for agricultural use. It is operated similar to a coin-operated car wash.

All water is purchased from the Friendship Water Company under a long term contract signed in 1989. In addition to the minimum charge of \$2,696 per month, the rates paid are based on the amount of water purchased annually as follows:

Up to 32.4 million gallons	\$1.62 per thousand gallons
32.4 million to 36 million gallons	\$1.47 per thousand gallons
Over 36 million gallons	\$1.25 per thousand gallons

The contract is also tied to the consumer price index and the per thousand gallon rate increases accordingly.

The plan developed by the City will take several years to resolve the issue. It has the following components:

1. The City has a natural gas system and most of the salaried time of employees is spent in that system. The Mayor is planning on transferring about \$5,000 worth of salaries from the water and sewer systems to the natural gas system. Staff suggested that the salary reallocation be based on some type of formula to ensure its accuracy.

- 2. The Mayor also wants to increase the minimum bills by \$2.00 per month (both water and sewer) next spring when the gas bills go down after the winter. The per thousand gallon rate will also be increased by \$0.25. The change will generate approximately \$8,000 each for the water and sewer department.
- 3. In 2010, the long time Public Works Director will retire saving about \$10,000 in salary expense.
- 4. There is a capital outlay note that will be paid off in 2011 that will free up about \$14,000 for other uses.
- 5. The first twenty sewer customers in the Tigrett area will be billed in November 2009 with the remaining seventy to be served by the second phase of the project currently in the bidding process.

Staff is concerned that the City is not eliminating the financially distressed problem quickly enough. This is a very small City in West Tennessee that – based on the information in the audit – is not growing. Although the negative change in net assets in the sewer fund appears to be declining annually, that is in large part because of the grant proceeds received. The water system negative change is fairly constant and the water loss is reflected at 28.95% in FY 08.

		CITY	FE	CITY OF FRIENDSHIP				ORDOZNIKA ZA		
		HISTORY FILE -	E >	ILE - SEWER	ď					
	Ā	Audited		Audited		Audited	•	Audited		Audited
Fiscal Year ended 6/30	N	2004		2005		2006		2007		2008
1	₩	80,874	49	82,013	₩.	76,902	₩	87,061	₩	84,259
Other revenues	₩	7,200	₩	9,436	↔	266,170	₩	41,759	₩	72,897
Total Operating Revenues	₩.	88,074	w	91,449	₩	343,072	₩.	128,820	₩.	157,156
Total Operating Expenses	₩	95,279	₩	102,105	₩	112,139	₩.	\$ 117,622	₩	143,694
Operating Income	49	(7,205)	₩	(10,656)	₩	230,933	4	11,198	₩	13,462
Interest Expense	₩	12,000	€	15,135	₩	13,675	₩	15,464	₩	15,287
Transfers out					₩	(2,000)	₩	(2,586)	₩	(3,000)
Change in Net Assets	<del>\$</del>	(19,205)	₩	(25,791)	₩	\$215,258	₩	(11,852)	₩	(4,825)
Supplemental Information										
Principal payment		\$10,000		\$16,000		\$16,000		\$17,862		\$17,965
Depreciation	₩	32,324	₩	33,321	₩	33,321	₩.	40,109	₩	40,109
Sewer Rates										
First 3,000 gallons - residential	\$	15.00	₩	17.50	₩	17.50	\$	17.50	₩	17.50
First 3,000 gallons - commercial					₩	25.00	₩	25.00	₩	25.00
Over 3,000 gallons	₩	3.50	₩	3.50	₩	3.50	₩	4.00	₩	4.00
Maximum charge- residential only	₩	25.00								
Customers		274		287		274		284		278
2005 Other revenes included grant proceeds of \$8,001	proce	eds of \$8	,001							
1 (1)	t proc	eeds of \$	252	609		indental material and another indental another indental and another indental				
2007 Other revenues included grant proceeds of \$41,110	t proc	eeds of \$	41,1	10						
2008 Other revenues included grant proceeds of \$72,000	t proc	eeds of \$	72,0	000						

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	a karangan mengan dan mengan karangan dan mengan dan karangan dan mengan mengan dan mengan dan mengan dan men		Projections -	ction	1s - Sewer							
						%0		Growth rate	Ö	Growth rate	5	Growth rate
	Audited	۵	Projected	مَ	Projected		à	Projection	Q.	Projection	ď	Projection
Fiscal Year ended 6/30	2008		2009		2010			2011		2012		2013
Sewer revenues	\$ 84,259	₩	84,259	₩	84,259		₩	84,259	₩	84,259	₩	84,259
Other revenues	\$ 72,897	₩	897	₩	897		₩	897	₩	897	₩	897
						95%	₩	80,046	₩	80,046	₩	80,046
Total Operating Revenues	\$ 157,156	4	85,156	4	85,156		4	165,202	₩	165,202	₩.	165,202
Total Operating Expenses	\$ 143,694	49	148,005	₩	152,445	3%	₩.	157,018	40	161,729	•	166,581
Operating Income	\$ 13,462	₩.	(62,849)	49	(62,289)		₩.	8,184	₩	3,473	49	(1,379)
Interest Expense	\$ 15,287	₩.	15,037	₩	11,359			\$8,125		\$7,375		\$6,625
Transfers out	(3,000)	₩	(3,000)	₩	(3,000)			(\$3,000)		(\$3,000)		(\$3,000)
Change in Net Assets	\$ (4,825)	4	(77,886)	₩	(78,648)		₩	29	₩	(3,902)	₩	(8,004)
Supplemental Information												
Principal payment	\$17,965	₩.	77,371	₩	56,756		₩	15,000	₩	15,000	₩	15,000
Depreciation	\$ 40,109	₩	40,109	₩	40,109		₩	40,109	₩	40,109	₩	40,109
Sewer Rates	ANCHANA MANAGEMENTE DE L'ANCHANT MENTE DE L'ANCHANT MENTE DE L'ANCHANT MENTE DE L'ANCHANT MANAGEMENT DE L'ANCHANT MENTE DE L'AN											
First 3,000 gallons - residentia	\$ 17.50											
First 3,000 gallons - commerci	\$ 25.00											
Over 3,000 gallons	\$ 4.00											
Maximum charge- residential o	only											
Customers	278											
2008 Other revenues included grant proceeds of \$72,000	grant proceeds	s of \$	72,000									

		ס	TY OF	CITY OF FRIENDSHIP		and the second s				
		HIST	ORY	HISTORY FILE - WATER	æ					
		Audited		Audited		Audited		Audited		Audited
Fiscal Year ended 6/30		2004		2005		2006		2007		2008
Water revenues	\$	108,758	₩	110,710	₩	114,699	₩	121,000	₩	120,914
Other revenues	₩	1,971	₩	475	₩	1,726	₩	1,153	₩	977
Total Operating Revenues	₩.	110,729	₩.	111,185	4	116,425	•	122,153	₩	121,891
Total Operating Expenses	4	118,099	40	114,996	₩	120,845	₩	107,208	4	124,113
Operating Income	<del>ν</del>	(7,370)	₩.	(3,811)	₩	(4,420)	₩	14,945	₩.	(2,222)
Interest Expense	₩	15,206	₩	12,586	<del>vs</del>	10,090	₩	8,783	w	9,692
Transfers out					₩	(4,000)	₩	(7,586)	₩	(3,000)
Change in Net Assets	4	(22,576)	•	(16,397)	4	(18,510)	4	(1,424)	₩	(14,914)
Supplemental Information										
Principal payment		\$35,004		\$31,604		\$32,083		\$32,094		\$22,149
Depreciation	₩	18,582	₩	32,092	↔	32,092	₩	31,426	₩	31,292
Water Rates										
First 3,000 gallons	₩	15.00	₩.	17.50	₩	17.50	₩	17.50	₩	17.50
Over 3,000 gallons	₩	3.50	₩	3.50	₩	3.50	\$	4.00	₩	4.00
Customers		330		345		336		348		345
Water Loss										28.974%

				C S	OFF	City of Friendship	Ω.						
				Proj	ectio	Projections - Water	-						
			***************************************				%0		Growth rate	Ď	Growth rate	25	Growth rate
	Audited	ited	Ę	Projected	ځ	Projected			Projection	ď	Projection	2	Projection
Fiscal Year ended 6/30	7	800		2009		2010			2011		2012		2013
Water revenues	\$ 120	120,914	₩	120,914	₩	120,914		₩	120,914	₩	120,914	49	120,914
Other revenues	₩.	977		977	49	977		₩.	977	₩.	776	₩	977
			e la constante de				16%		19,346	₩	19,346	₩	19,346
Total Operating Revenu	\$ 12	1,891	₩	121,891	<b>₩</b>	\$ 121,891		₩	\$ 141,237	₩	141,237	49	141,237
Total Operating													
Expenses	\$ 124	4,113	₩	\$ 127,836	₩	\$ 131,671	3%		\$ 135,621	4	139,690	₩	\$ 143,880
Operating Income	\$	(2,222)	₩	(5,945)	4	(9,780)		49	5,616	₩	1,547	₩.	(2,643)
Interest Expense	5	9,692	49	7,799	49	6,159			\$4,520		\$0		\$0
Transfers out	(E) \$	(3,000)	4	(3,000)	l	(3,000)			(\$3,000)		(\$3,000)		(\$3,000)
Change in Net Assets	\$ (14	4,914)	<b>S</b>	(13,744)	\$	(15,939)		₩	1,096	₩	1,547	₩.	(2,643)
Supplemental Information													
Principal payment	\$25	\$22,149	49	20,083	<del>()</del>	20,083		43	88,456				entre en en
Depreciation	\$ 31	31,292	₩.	31,292	₩	31,292		₩	31,292	₩	31,292	₩	31,292
Water Rates				The state of the s									
First 3,000 gallons	8	17.50											
Over 3,000 gallons	₩	3.50											
Customers		345											
Water Loss	28.9	974%											

# 68-221-1007. Wastewater financing board — Purpose. —

Recognizing that the operation of publicly owned water systems and wastewater facilities is necessary for the protection of the public health and the environment, and recognizing that water systems and wastewater facilities operating with continuous financial losses threaten the proper operation of water systems and wastewater facilities, it is declared to be the purpose of this section and §§ 68-221-1008 — 68-221-1012 to correct financial losses through the establishment of a water and wastewater financing board empowered to effect reasonable user rate increases or to effect system efficiencies through the negotiated consolidation of certain water systems and wastewater facilities.

[Acts 1987, ch. 299, § 7; T.C.A., § 68-13-1007; Acts 1997, ch. 483, § 9.]

**Section to Section References.** Sections 68-221-1007 — 68-221-1013 are referred to in §§ 68-221-1010, 68-221-1011.

Sections 68-221-1007 — 68-221-1012 are referred to in §§ 68-221-1008 — 68-221-1010.

68-221-1008. Wastewater financing board — Created — Responsibility — Members — Terms — Expenses — Quorum — Conflict of interest — Records — Duties of director. —

- (a) (1) A water and wastewater financing board is established in the office of the comptroller of the treasury to determine and ensure the financial integrity of certain water systems and wastewater facilities.
- (2) The board is charged with the responsibility of furthering the legislative objective of self-supporting water systems and wastewater facilities in this state and shall be deemed to be acting for the public welfare in carrying out the provisions of §§ 68-221-1007 68-221-1012.
  - **(b)** Such board shall be composed of the following members:
- (1) The comptroller of the treasury, or the comptroller's designee, who shall serve as chair;
  - (2) The commissioner, or the commissioner's designee;
- (3) One (1) member, appointed by the governor, who shall represent the municipalities of the state. The governor shall consult with the president of the Tennessee municipal league to determine a qualified person to fill this post;
  - (4) One (1) member, appointed by the governor, who shall represent utility districts in

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the state. The governor shall consult with the president of the Tennessee Association of Utility Districts to determine a qualified person to fill this post;

- (5) One (1) member, appointed by the governor, who shall represent the environmental interests of the state. The governor shall consult with the president of the Tennessee environmental council to determine a qualified person to fill this post;
- (6) One (1) member appointed by the governor, who shall represent the manufacturing interests in the state. The governor shall consult with the president of the Tennessee Association of Business to determine a qualified person to fill this post;
- (7) One (1) member, appointed by the governor, who shall represent the minority citizens of the state. Such member shall have experience in governmental finance and shall not otherwise be a state employee;
- (8) One (1) member appointed by the governor, who is an active employee of a municipal water utility and one (1) member who is an active employee of a water utility district. The governor shall consult with the president of the Tennessee Association of Utility Districts to determine qualified persons to fill these appointments.
- (c) (1) Board members shall serve for a three-year term except as designated herein, and all appointments shall expire on June 30 of the appropriate year. A board member shall continue to serve, however, until a successor has been appointed, or until the board member has been reappointed.
- (2) Appointments to succeed a board member who is unable to serve such board member's full term shall be for the remainder of that term.
- (3) Board members may be reappointed, but they do not succeed themselves automatically.
- (4) Appointments to the board for the remainder of an unexpired term and reappointments shall be made in the same manner as under subsection (b).
- (d) Each member of the board shall be entitled to receive reimbursement for such member's traveling and other necessary expenses actually incurred while engaged in the performance of any official duties when so authorized by the board, but such expenses shall be made in accordance with the comprehensive state travel regulations duly promulgated by the commissioner of finance and administration and approved by the attorney general and reporter.
- (e) A majority of the board shall constitute a quorum and the concurrence of a majority of those present and voting in any matter shall be required for a determination of matters within its jurisdiction.

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- (f) No board member may participate in making a decision in any case involving a local government or water system or wastewater facility in which the board member has a direct financial interest, including a contract of employment.
- **(g)** The board shall keep complete and accurate records of the proceedings of all their meetings. All such records shall be kept on file in the office of the comptroller and open to public inspection.
- (h) The comptroller shall designate a staff person to serve as the technical secretary to the board. In that capacity, the designee shall report the proceedings of the board and perform such other duties as the board may require.
- (i) For the purposes of this part, "water systems and wastewater facilities" shall also mean any treatment authority created pursuant to part 6 of this chapter, and that operates a water or wastewater facility. The treatment authorities shall file or cause to be filed with the comptroller independently prepared audited financial statements. The authority shall be subject to the jurisdiction of the water and wastewater financing board in accordance with this chapter.

[Acts 1987, ch. 299, § 8; T.C.A., § 68-13-1008; Acts 1997, ch. 483, §§ 10-13, 22; 2007, ch. 86, §§ 3-7.]

**Compiler's Notes.** The wastewater financing board, created by this section, terminates June 30, 2014. See §§ 4-29-112, 4-29-235.

**Amendments.** The 2007 amendment substituted "comptroller of the treasury" for "department" in (a)(1); in (b), substituted "comptroller of the treasury or the comptroller's designee" for "commissioner, or the commissioner's designee" in (b)(1) and substituted "commissioner, or the commissioner's designee" for "comptroller of the treasury or the comptroller's designee" in (b)(2); substituted "comptroller" for "director" in the second sentence in (g); in (h), substituted "The comptroller shall designate a staff person to serve" for "The director shall serve" in the first sentence and substituted "designee" for "director" in the second sentence; and added (i).

Effective Dates. Acts 2007, ch. 86, § 8, May 3, 2007.

**Section to Section References.** Sections 68-221-1008 — 68-221-1012 are referred to in § 68-221-1007.

This section is referred to in §§ 4-29-235, 7-82-401.

# 68-221-1009. Wastewater financing board — Powers and duties. —

- (a) Duties and authority of the board include, to:
  - (1) Adopt, modify, repeal, and promulgate rules in accordance with the Uniform

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Administrative Procedures Act, compiled in title 4, chapter 5, and, after due notice, to enforce rules and regulations which the board deems necessary for proper administration of §§ 68-221-1007 — 68-221-1012;

- (2) Investigate and determine the financial condition of water systems and wastewater facilities under its jurisdiction;
- (3) Effect the adoption of user rates necessary for the self-sufficient operation of certain water systems and wastewater facilities and to negotiate the consolidation of certain water systems and wastewater facilities pursuant to §§ 68-221-1007 68-221-1012;
- (4) Ameliorate the burden of rate increases effected under this part borne by low-income customers of water systems and wastewater facilities through the establishment and administration of a rate subsidy program to the extent state appropriations are available;
- (5) Issue subpoenas requiring attendance of witnesses and production of such evidence as requested; administer oaths; and take such testimony as the board deems necessary in fulfilling its purpose. In case of the refusal of any person or entity to obey a notice of hearing or subpoena issued by the board under this part, the chancery court of Davidson County shall have jurisdiction upon application of the board to issue an order requiring such person to appear and testify or produce evidence as the case may require, and any failure to obey such order of the court may be punished by such court as contempt;
- (6) In the case of public water systems, investigate, with the assistance of the department and the comptroller of the treasury, and determine the financial, technical, and managerial capacity of the systems to comply with the requirements of the federal and state acts; and to require systems to take appropriate action to correct any deficiencies in such areas, including, but not limited to, changes in ownership, management, accounting, rates, maintenance, consolidation, alternative water supply, or other procedures. The board also may approve or disapprove such corrections as a condition for the receipt of assistance under § 68-221-1206(a)(3);
- (7) Establish, adopt and promulgate in accordance with the Uniform Administrative Procedures Act, compiled in title 4, chapter 5, rules to define excessive unaccounted for water losses for public water systems; and
- (8) In the case of public water systems, to investigate public water systems whose unaccounted for water loss as reported in the public water system's audit is excessive as established by rules promulgated by the board and to require those public water systems to take appropriate actions to reduce unaccounted for water loss to an acceptable level as determined by the board.
  - (b) The board shall be authorized to act only as to those water systems and wastewater

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facilities brought before it upon recommendation of the comptroller of the treasury as provided in § 68-221-1010.

[Acts 1987, ch. 297, § 9; T.C.A., § 68-13-1009; Acts 1997, ch. 483, §§ 14, 15; 2007, ch. 243, §§ 5, 6.]

Compiler's Notes. Acts 2008, ch. 779, § 1 provided that the water and wastewater financing board shall conduct a study of all water and sewer rates set by a municipality providing water or sewer, or both, to customers inside the municipal jurisdictional boundaries as well as customers outside the municipal jurisdictional boundaries. The study shall at a minimum focus on the water rates, sewer rates, and tap fee rates charged to those customers inside the municipal jurisdictional boundaries as well as the customers outside the municipal jurisdictional boundaries. With respect to any county having a metropolitan form of government, the study shall include the rates set between customers in the urban services district and the general services district. The study shall identify and report the number of customers within the city or urban services district and those outside the city or urban services district. If the study determines there is a difference in the rates set greater than one hundred percent (100%), the board shall evaluate whether the difference in the rates is reasonable and justified. The board shall file a report with the governor and the speakers of each house of the general assembly by January 1, 2009, together with its recommendations as to whether any or all of the rates should be altered or modified.

Amendments. The 2007 amendment added (a)(7) and (a)(8).

**Effective Dates.** Acts 2007, ch. 243, § 9. July 1, 2007; provided, that for the purposes of promulgating rules and regulations, the act shall take effect May 24, 2007.

Cross-References. Contempt of court, title 29, ch. 9.

**Section to Section References.** This section is referred to in § 68-221-1010.

# 68-221-1010. Facilities with earnings or operating deficit, or operating in default. —

- (a) Within sixty (60) days from the time that an audit of a water system or wastewater facility is filed with the comptroller of the treasury, the comptroller of the treasury shall file with the board the audit report of any water system or wastewater facility that has a deficit total net assets in any one (1) year, has a negative change in net assets for two (2) consecutive years or is currently in default on any of its debt instruments.
- (b) (1) Within sixty (60) days from the receipt of the audit report filed by the comptroller of the treasury, the board shall schedule a hearing to determine whether the water system or wastewater facility described in the report is likely to continue in a deficit position. In reaching its determination, the board shall consider current user rates charged by the water system or wastewater facility, the size of the facility and the local government served by it, the quality of the facility's operation and management, and other relevant criteria.
  - (2) Upon a determination that the water system or wastewater facility is likely to remain

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in a deficit position, the board may order the management of the water system or wastewater facility to adopt and maintain user rate structures necessary to:

- (A) Fund operation, maintenance, principal and interest obligations and adequate depreciation to recover the cost of the water system or wastewater facility over its useful life;
  - (B) Liquidate in an orderly fashion any deficit total net assets; and
- (C) Cure a default on any indebtedness of the water system and wastewater facility.
- (3) Any such order shall become final and not subject to review unless the parties named therein request by written petition a hearing before the board, as provided in §§ 68-221-1007 68-221-1013, no later than thirty (30) days after the date such order is served. Any hearing or rehearing provided by §§ 68-221-1007 68-221-1013 shall be brought pursuant to the Uniform Administrative Procedures Act, compiled in title 4, chapter 5, part 3. Such hearing may be conducted by the board at a regular or special meeting by any member or panel of members as designated by the chair to act on its behalf, or the chair may designate an administrative judge who shall have the power and authority to conduct hearings in the name of the board to issue initial orders pursuant to the Uniform Administrative Procedures Act, compiled in title 4, chapter 5.
- (c) In the event a water system and wastewater facility fails to adopt user rate structures pursuant to a final order of the board, the board may petition the chancery court in a jurisdiction in which the water system and wastewater facility is situated or in the chancery court of Davidson County to require the adoption of the user rate structures ordered by the board or to obtain other remedial action, which, in the discretion of the court, may be required to cause the water system and wastewater facility to be operated in a financially self-sufficient manner.
- (d) (1) Within sixty (60) days from the time that an audit of a water system is filed with the comptroller of the treasury, the comptroller of the treasury shall file with the board the audit report of any water system whose unaccounted for water loss as reported in the audit is excessive as established by rules promulgated by the board.
- (2) In the event a water system fails to take the appropriate actions required by the board to reduce the water loss to an acceptable level pursuant to § 68-221-1009(a)(7), the board may petition the chancery court in a jurisdiction in which the water system is operating to require the water system to take such actions.

[Acts 1987, ch. 299, § 10; T.C.A., § 68-13-1010; Acts 1992, ch. 1023, § 1; 1993, ch. 288, § 1; 1993, ch. 329, §§ 1, 2; 1997, ch. 483, §§ 16, 17; 1998, ch. 981, § 1; 2004, ch. 619, §§ 1-6; 2007, ch. 243, § 7; 2009, ch. 72, § 3.]

Compiler's Notes. The language "water system and wastewater facility" has been substituted for "wastewater system" near the beginning of the second sentence in (a)(1), in accord with the apparent legislative intent of Acts 1997, ch. 483, § 16.

Amendments. The 2007 amendment added (d).

The 2009 amendment rewrote (a) which read: "(a)(1) Within sixty (60) days from the time that an audit of a water system or wastewater facility is filed with the comptroller of the treasury, the comptroller of the treasury shall file with the board the audit report of any water system or wastewater facility which has a deficit total net assets in any one (1) year or, for a period of three (3) consecutive years, has a negative change in net assets, or is currently in default on any of its debt instruments. However, if a water system or wastewater facility has total net assets at least four (4) times greater than total debt, depreciation expense shall not be considered in determining the above criteria for filing the report with the board, "(2) It is the intent of this subsection (a) to permit and encourage the orderly development of wastewater facilities capable of meeting anticipated growth without overburdening initial users of the facility. In any local government having a wastewater facility, for the first seven (7) years after the beginning of operations there may be a phase-in of depreciation costs, as hereinafter provided. In determining whether a facility has a deficit total net assets or a negative change in net assets, during the first seven (7) years of operations, depreciation expense shall not be considered. After seven (7) years of operations all depreciation expense shall be considered."(3) In determining whether a facility has a deficit total net assets or a negative change in net assets, amounts derived from tap fees, connection charges, or other related fees and charges which are considered contributed capital, shall be considered revenue."

**Effective Dates.** Acts 2007, ch. 243, § 9. July 1, 2007; provided, that for the purposes of promulgating rules and regulations, the act shall take effect May 24, 2007.

Acts 2009, ch. 72, § 4. April 15, 2009.

Section to Section References. This section is referred to in § 68-221-1009.

Attorney General Opinions. If, after applying the accounting method provided for in former subdivision (a)(2) of T.C.A. § 68-221-1010, a water system or wastewater facility is in a deficit position and is referred to the water and wastewater financing board, the board must continue using that same accounting method, i.e., not depreciating grant fund acquired assets, in determining user rates to correct the deficit, OAG 01-097 (6/13/01).

The accounting method provided for in former subdivision (a)(2) of T.C.A. 68-221-1010, i.e., not depreciating grant fund acquired assets, is to be used in all subsequent financial audits, as long as the system's or facility's user base remains at 900 or fewer customers, OAG 01-097 (6/13/01).

Any conflict between general accounting principles and the accounting principles provided for in former subdivision (a)(2) of T.C.A. § 68-221-1010, which provides for not depreciating grant fund acquired assets, is to be resolved in favor of a strict interpretation of the statute, that is, not depreciating those particular assets, OAG 01-097 (6/13/01).

# 68-221-1011. Consolidation of facilities. —

(a) As a means to restore the financial stability of a water system or wastewater facility

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under its jurisdiction, and to ensure the continued operations of water system or and wastewater facilities for the benefit of the public being served by such water system or wastewater facility, the board may facilitate, assign a mediator, or otherwise participate in negotiations for the consolidation of a water system or wastewater facility under the board's jurisdiction with another water system or wastewater facility or other public utility which, in the determination of the board, is best suited to operate a deficit water system or wastewater facility. Such consolidation shall be upon those terms as agreed upon by all of the affected parties. Such agreement shall provide that the ultimate owner or operator of the facility will assume the operation of the facility in such territory and account for the revenues therefrom in such manner as not to impair the obligations of contract with reference to outstanding bond issues or other legal obligations of the consolidating water systems and wastewater facilities, and shall fully preserve and protect the contract rights vested in the owners of such outstanding bonds, obligations or contractual interests.

- **(b)** The board is authorized to subsidize, from appropriations made to it, the repair or improvement of the deficit water system or wastewater facility as an incentive for consolidation in negotiating any consolidation under this part. In addition, the board may contract for the services of a professional mediator if in its opinion such mediator is needed to effect any consolidation under §§ 68-221-1007 68-221-1013.
- (c) Prior to consolidation of any water system or wastewater facility pursuant to §§ 68-221-1007 68-221-1013, the board shall hold a public hearing of all interested parties to such consolidation at a place convenient to such parties at least sixty (60) days prior to the effective date of such consolidation. Notice of such public hearing shall be published in a newspaper of general circulation in the affected area not later than ten (10) days prior to the meeting.
- (d) If the parties to consolidation fail to reach an agreement within two hundred seventy (270) days from the commencement of negotiations, or such consolidation proceedings are otherwise terminated, the board is authorized to take appropriate action provided by §§ 68-221-1007 68-221-1013 to effect the legislative intent of financially self-sufficient water systems and wastewater facilities.

[Acts 1987, ch. 299, § 11; T.C.A., § 68-13-1011; Acts 1997, ch. 483, § 18.]

# 68-221-1012. Annual audited financing statements provided. —

- (a) The comptroller of the treasury shall provide the board on an annual basis all annual audited financial statements of those water systems and wastewater facilities within the board's jurisdiction.
  - (b) Public water systems shall include in their annual audit the public water system's annual

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average unaccounted for water loss percentage in the manner prescribed by the comptroller of the treasury.

[Acts 1987, ch. 299, § 12; T.C.A., § 68-13-1012; Acts 1997, ch. 483, § 19; 2007, ch. 243, § 8.]

Amendments. The 2007 amendment added (b).

**Effective Dates.** Acts 2007, ch. 243, § 9. July 1, 2007; provided, that for the purposes of promulgating rules and regulations, the act shall take effect May 24, 2007.

68-221-1013. Appeals. —

Any person or entity having a hearing before the board may appeal the board's order or ruling pursuant to the Uniform Administrative Procedures Act, compiled in title 4, chapter 5.

[Acts 1987, ch. 297, § 13; T.C.A., § 68-13-1013.]

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## WATER AND WASTEWATER FINANCING BOARD Case Study

Case: Town of Surgoinsville, Hawkins County

Mayor: Johnny Greer Population: 1,861 (2006)

The Town of Surgoinsville wants to construct a sewer collection system. The cost of the project (phase 1) is estimated at \$3,030,000 and will be funded as follows:

Appalachian Regional Commission Grant (ARC)	\$	500,000
Community Development Block Grant (CDBG)	\$	500,000
Hawkins County Government (on behalf of the 2 schools)	\$	200,000
Community Projects Grant (USDA- RDA)	\$1	,300,000
Community Projects Loan (USDA – RDA)	\$	530,000

The system will provide service to a middle school and an elementary school initially with forty (40) residential customers to be served within the first 12-18 months. Cost projections for phase two have not been prepared. It is the understanding of the Town officials that a special appropriation from a federal government has been approved to assist with the second phase funding. There are approximately 225 customers in that phase, which should take four years to complete. There are at least 200 customers that would be considered in phase three. Many of the customers, especially in later phases, are considered low to moderate income and grant funding is typically available to those potential customers for tap fee assistance. Tap fees have not yet been determined, but the number being "tossed around" is \$900. One concern of staff is the ability of the potential customers to pay the monthly sewer fee – even if the tap fee is paid by another agency.

The annual debt service for phase 1 is \$29,363, based on \$530,000 for 38 years at 4.5%. The annual depreciation expense, based on the total project cost over a 50 year life, is \$60,600. The average monthly residential sewer bill is projected to be between \$21.14 and \$69.01, depending on the option chosen. The combined average for the schools will be between \$881.63 and \$9,663.25, again depending on the option chosen.

Surgoinsville has obtained a letter of intent from the Town of Church Hill to treat the waste. They have also received a letter of intent from the local water provider, Surgoinsville Utility District, to provide billing and collection services, but staff is unsure if there is a provision included to cut off the water for non payment of the sewer. Although the most recent "septic tank failure survey" was conducted by the Tennessee Department of Environment and Conservation in September 1992, the Town officials believe that septic tank issues are very severe and a major health hazard. The odor and "pooling" of septic tanks is evident in the Town – especially in dry periods. The Department has received individual complaints regarding septic tank overflows, but they are very limited.

The Water and Wastewater Financing Board has no jurisdiction to allow or prevent the creation of a sewer system in a municipality. TCA 68-221-1009 (b) states "The board shall be authorized to act only as to those water systems and wastewater facilities brought before it upon recommendation of the comptroller of the treasury..." The main concern of the Town of Surgoinsville is the passage of Public Chapter 72 of 2009. That act eliminated the seven-year exemption to allow a new system to "grow" into its customer base before considering depreciation - only for reporting purposes to the Board. TCA 68-221-1010 (a)(2) previously stated in part "...for the first seven (7) years after the beginning of operations there may be phase-in of depreciation costs...In determining whether a facility has a deficit total net assets or a negative change in net assets, during the first seven (7) years of operations, depreciation expense shall not be considered."

The Town is requesting relief for its growth period – prior to building the system.

Staff understands that the Town and its consultants mistakenly thought that the depreciation would not be included in the audit for a period of seven years, and, therefore, did not include it in original cost projections. Even with the elimination of the "seven year window", the Board has, within its own rules, the authority to require a system to "fund depreciation within 1-3 years, *unless otherwise specified by the Board*." If depreciation expense is not properly accounted for within the first years of operation, the deficit that must be overcome may be very large — creating an insurmountable

Staff has toured the area and met with the Mayor, Town Council, their attorney, engineer, auditor, development district representatives and State Representative Mike Harrison. Everyone at the meeting was very supportive of the project – in fact, the Mayor and council ran for election on the platform of building a sewer system. There is also a strong desire in the Town to grow and to get a grocery store. Neither is possible without a sewer system. There appears to be no doubt that the system is needed for health or environmental reasons, however, based on current law, the proposed rates will not be sufficient to cover the expenses.

There are several state statutes that require rates to be sufficient –

obstacle.

TCA 68-221-1009(a)(3) ...user rates necessary for the self-sufficient operation of certain water systems and wastewater facilities...

TCA 68-221-1010(b)(2)(A) Fund operation, maintenance, principal and interest obligation and adequate depreciation to recover the cost of the water system or wastewater facility over its useful life.

TCA 7-34-114 (a)(2) Provide for all expenses of operation and maintenance of such public works, including reserves for the expenses and maintenance.

TCA 7-34-115 (a) "...as a matter of public policy, municipal utility systems shall be operated on sound business principles as self sufficient entities. User charges, rates and fees shall reflect the actual cost of providing the services rendered."

TCA 9-21-308 (e) "...as a matter of public policy, public works projects financed under the provisions of this chapter shall be operated on sound business principles as self sufficient entities. User charges, rates and fees shall reflect the actual cost of providing the services rendered.

## PRELIMINARY ENGINEERING REPORT

For:

## SURGOINSVILLE SANITARY SEWER SYSTEM DEVELOPMENT PROJECT

Prepared For:

## THE TOWN OF SURGOINSVILLE SURGOINSVILLE, TN

April 6, 2009

TH&P PROJECT NO. 0712901C



# TH&P

## TYSINGER, HAMPTON & PARTNERS, INC.

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P.O. BOX 982

JOHNSON CITY, TENNESSEE 37605-0982

TELEPHONE (423) 282-2687

<a href="http://www.tysinger-engineering.com/">http://www.tysinger-engineering.com/</a>

3428 BRISTOL HIGHWAY
JOHNSON CITY, TENNESSEE 37601-1345
FAX (423) 282-1621
thp@tysinger-engineering.com

## **TABLE OF CONTENTS**

l.	Introduction 1			
11.	Purpose and	d Need for Project1		
	Treatment C	Options2		
IV.	Collection System Routing Alternatives			
V.	Permitting	7		
VI.	Project Bud	get8		
VII.	Alternatives	Analysis 8		
VIII.	Project Fund	ding10		
IX.	Operation a	nd Maintenance11		
X.	Recommend	dations11		
XI.	Conclusions	13		
		APPENDIX		
Apper	ndix A	Location Map		
Appendix B		Sanitary Sewer System Development Alternative Maps		
Appendix C		Preliminary Opinion of Probable Project Cost		
Appendix D		Project Funding and Sewer Cost Analysis		

**APRIL 6, 2009** 

I. INTRODUCTION

The following preliminary engineering report was prepared for the Town of Surgoinsville, which is centrally located in Hawkins County, Tennessee as shown on the location map included in Appendix A. The Town is situated between Rogersville and Church Hill, and is approximately 4.1 square miles in size. Access to the northwest section of Town is provided by Highway 11W, and State Route 346 (Main Street) provides access to the central parties of the Town

Route 346 (Main Street) provides access to the central portion of the Town.

Surgoinsville is bordered on the southeast by the Holston River and Norfolk

Southern Railway.

The Town had an estimated population of approximately 1,754 in 2006 (U.S. Census Bureau, 2006 Population Estimates, Census 2000, 1990 Census). The median household income for the Town was \$35,391 (in 1999 dollars), with approximately 5.6% of the families, and 9.3% of the individuals below the poverty

level (U.S. Census Bureau, 2000 Census).

The Town does not currently have a public wastewater system. The schools, residents, and businesses in this community utilize private systems for disposal of their wastewater. The Town's schools, Surgoinsville Middle and Surgoinsville Elementary, dispose of their wastewater via a package treatment plant which

discharges into an unnamed tributary of Forgey Creek.

II. PURPOSE AND NEED FOR PROJECT

Due to the cost and long-term maintenance issues associated with the operation and maintenance of the package wastewater treatment plant at the Surgoinsville Middle and Elementary Schools, the Town of Surgoinsville is exploring the options available to provide an alternate means of wastewater disposal for the schools. Access to a public wastewater system will provide an effective long-

APRIL 6, 2009

term solution to the school's wastewater needs, and allow removal of the package plant.

Elimination of the package treatment plant at the schools will alleviate the expenses associated with the oversight, maintenance, permitting, and operation of the plant. The plant has been in service since approximately the 1950's, and was originally constructed to serve only one school. While recent upgrades will extend the life of the plant, the school system and Town are seeking a long-term and cost-effective solution to meet their current and future wastewater needs. In the absence of a public sanitary sewer system, the growth potential for the schools and the Town are limited.

The Town of Surgoinsville is investigating the possibility of developing a public wastewater collection system. The purpose of this report is to identify and evaluate the options available to the Town for development of a public sanitary sewer system to initially provide service to the Surgoinsville Middle and Elementary Schools, and to the Town in future phases of the system development. This report will evaluate the options available for treatment of the wastewater, and provide an analysis of the collection system routing alternatives including preliminary opinions of probable project cost and permitting. Recommendations for the most viable alternative, possible project funding sources, and the operation and maintenance of the system are also provided in this report.

### **III. TREATMENT OPTIONS**

A public sanitary sewer system for the Town of Surgoinsville will require a means of treatment for the wastewater. This can be accomplished by building a wastewater treatment plant in the Town or by discharging into an adjacent community's existing collection system. While it is desirable over the long-term

**APRIL 6, 2009** 

to construct a wastewater treatment facility for the Town, it is not a cost-effective solution for Surgoinsville at this time. The Town does not currently have the manpower or the financial resources available to construct, operate, and maintain a wastewater treatment plant; therefore, discharge into an adjacent system is currently the only feasible option for the Town.

The closest wastewater system to Surgoinsville is owned and operated by the Town of Church Hill. Church Hill's existing sanitary sewer system extends into the Phipps Bend Industrial Park which is approximately 2.5 miles east of Surgoinsville. Their system includes a 500 gallon per minute (GPM) pump station in the Park, as well as a newly upgraded wastewater treatment plant with a capacity of 3.5 million gallons per day (MGD). The plant currently operates at approximately 600,000 GPD, or 17% of its total capacity. Church Hill's existing treatment plant will adequately handle the additional discharge created by the Town of Surgoinsville. Based on the options currently available, discharge into the Town of Church Hill's sanitary sewer system is the most viable solution to meet the Town of Surgoinsville's immediate wastewater needs.

## **IV. COLLECTION SYSTEM ROUTING ALTERNATIVES**

There are several possible routes in which the Surgoinsville wastewater system can connect to the Church Hill system. In developing the possible routing options, consideration was given to permitting, easement acquisition, future expansion of the system, and the cost of construction. The three most feasible route alternatives for connection of the schools to the Church Hill system were investigated for this report, and a map of each option is provided in Appendix B.

The following is a brief description of the alternatives evaluated:

### Alternative #1:

Construct a pump station at the schools, pump through a 6-inch force main along Main Street and Phipps Bend Road, discharge into Church Hill system at the fire station.

### Alternative #2:

Construct a pump station at the schools, pump through a 4-inch force main along Main Street to Campbell Williams Road, gravity flow through 8-inch line along drainage-way to a second pump station off Anderson Street, pump through a 6-inch force main along Main Street and Phipps Bend Road, discharge into Church Hill system at the fire station.

#### Alternative #3:

Construct a pump station at the schools, pump through a 4-inch force main along Main Street to Campbell Williams Road, gravity flow through an 8-inch line along the drainage-way to a second pump station off Anderson Street, pump through a 6-inch force main along Main Street and Sally Young Road, follow railroad spur and private roadway to Industrial Drive, discharge into Church Hill system at the fire station.

**APRIL 6, 2009** 

The following is a detailed description of the infrastructure items included in each

alternative:

Alternative #1

Alternative #1 proposes to construct a pump station at the Surgoinsville

Middle and Elementary Schools on Main Street. From the pump station, a

six-inch force main will convey wastewater along Main Street

approximately 4.8 miles to Phipps Bend Road. The force main will

continue along Phipps Bend Road approximately one mile in the Industrial

Park, discharging into the existing Church Hill sanitary sewer system

manhole located near the fire station.

The force main is sized to accommodate the addition of future flows to the

system. Future additions to the system to serve the Town will require

additional pump stations to discharge into a common force main.

Alternative #2

In Alternative #2, wastewater from the Surgoinsville Middle and

Elementary Schools will be collected by a pump station, and a four-inch

force main will convey wastewater along Main Street approximately one

mile to Campbell Williams Road. The force main will discharge into a

manhole which will be located near the intersection of Campbell Williams

Road and Anderson Street.

From the manhole, sewage will flow through an eight-inch gravity sewer

line constructed along the drainage-way off Anderson Street. It will flow

through the gravity line approximately 1,300 feet where it will then

discharge into a second pump station. The second pump station will

discharge into a six-inch force main that follows Main Street approximately

**APRIL 6, 2009** 

3.8 miles to Phipps Bend Road. The force main will continue along Phipps Bend Road approximately one mile in the Industrial Park, discharging into the existing Church Hill sanitary sewer system manhole located near the fire station.

The Anderson Street pump station and the six-inch force main are sized to accommodate current and future flows. The station is situated such that a future system of gravity sewer lines can be extended to serve the Surgoinsville Creek drainage basin, including approximately 241 properties in Town. This option will provide sewer service to the schools, and can easily be expanded in a future phase to serve the majority of the Town by gravity.

## **Alternative #3**

The routing proposed in Alternative #3 is similar to Alternative #2 except the six-inch force main will follow Sally Young Road instead of Phipps Bend Road. From Sally Young Road, the force main will continue approximately 1.3 miles, crossing the railroad. It will then parallel an existing railroad spur and private roadway toward Industrial Drive. It will continue along Industrial Drive to the intersection with Phipps Bend Road. The force main will continue along Phipps Bend Road in the Industrial Park, discharging into the existing Church Hill sanitary sewer system manhole located near the fire station.

The Anderson Street pump station and the six-inch force main are sized to accommodate current and future flows. The station is situated such that a future system of gravity sewer lines can be extended to serve the Surgoinsville Creek drainage basin, including approximately 241 properties in Town. This option will provide sewer service to the schools,

and can easily be expanded in a future phase to serve the majority of the Town by gravity.

## V. PERMITTING

All of the alternatives evaluated in this report will require permitting before construction can begin. The following table includes a basic summary of the permits that are expected to be required for each alternative considered:

**TABLE 1 - ESTIMATED PERMITS** 

PERMIT AGENCY	PERMIT NAME	ALTERNATIVE REQUIRING PERMIT
Tennessee Valley Authority (TVA)	Shoreline Construction Permit	ALL
Army Corps. Of Engineers (ACOE)	Nationwide Permit 12	ALL
Tennessee Department of Environment and Conservation (TDEC)	General Construction Permit	ALL
Tennessee Department of Environment and Conservation (TDEC)	Aquatic Resources Alteration Permit (ARAP) Section 401 Water Quality Certification	ALL
Tennessee Department of Environment and Conservation (TDEC)	National Pollution Discharge Elimination System (NPDES)	ALL
Norfolk Southern Railway	Pipe Occupancy Agreement	ALT. #3
Tennessee Department of Transportation (TDOT)	Utility Use and Occupancy Agreement	ALL

As shown in Table 1, all three alternatives will require the same basic permitting, with the exception that Alternatives #1 and #2 are not expected to require permit approval from Norfolk Southern Railway to bore under or parallel the railroad.

## VI. PROJECT BUDGET

A preliminary opinion of probable project cost for each alternative is provided in Table 2 below. The total cost shown for each alternative considered includes an estimate of the materials, labor, installation, engineering design, legal services, easement acquisition, permitting, and administrative fees. Due to the complexity of the project and the volatility of materials and fuel prices, this preliminary opinion of probable cost should not be considered a guaranteed maximum figure. Additionally, the cost of permitting with the railroad is dependent upon current land appraisal values.

TABLE 2

PRELIMINARY OPINION OF PROBABLE PROJECT COST

ALTERNATIVE NUMBER	CONSTRUCTION COST	ADDITIONAL COSTS	TOTAL
1	\$2,326,000	\$501,000	\$2,827,000
2	\$2,489,000	\$540,000	\$3,029,000
3	\$2,484,000	\$644,000	\$3,128,000

### VII. ALTERNATIVES ANALYSIS

Alternative #1 is the least expensive option evaluated. This routing alternative would provide the necessary infrastructure to initially meet the needs of the schools, as well as accommodate future expansion of the system to serve the Town. It is estimated that Alternative #1 could be constructed within existing rights-of-way, eliminating the need for easement acquisition. Permitting with the Norfolk Southern Railway is not expected to be required for this alternative. The

APRIL 6, 2009

primary disadvantage of Alternative #1 is that future pumping stations and gravity

lines would be required in order to serve the Town.

Alternative #2 is the second most expensive option evaluated. This routing

alternative would also provide the necessary infrastructure to initially meet the

needs of the schools, as well as accommodate future expansion of the system to

serve the Town. The same permits anticipated to be required for Alternative #1

will be required for Alternative #2. The primary advantage of this alternative is a

second pumping station which is situated such that gravity lines could be

extended to serve the Town in the future.

Alternative #3 is the most expensive option evaluated. This option would also

provide the necessary infrastructure to initially meet the needs of the schools, as

well as accommodate future expansion of the system to serve the Town. The

second pump station proposed in this Alternative would also allow future

extension of the system by gravity lines. Alternative #3 will require the same

permits as Alternatives #1 and #2, but additional permitting from Norfolk

Southern Railway would be required for the railroad crossing and parallelism of

the railroad.

Evaluation of the above alternatives indicates that routing Alternative #2 is the

most viable option for the development of a sanitary sewer system for the Town

of Surgoinsville. It provides the most effective initial routing and system design to

meet the current and future demands of the Town. In addition, Alternative #2

minimizes the number of easements and permits required for construction;

delays due to easement acquisition and permit approvals can negatively

influence the cost of construction and the time required to complete the project.

APRIL 6, 2009

## VIII. PROJECT FUNDING

The customer base that will initially be served by the Surgoinsville sewer system will be limited to the Surgoinsville Middle and Elementary Schools; therefore, the Town will not be able to recover the cost of construction of the project through user fees alone. In order to fund the project, the Town is applying for financial assistance through a combination of grants and low interest loans.

Two potential sources of assistance are through the Community Development Block Grant (CDBG) and the Appalachian Regional Commission (ARC). Since the project will provide sewer service to the schools and enabling them to eliminate their package wastewater treatment plant, the Hawkins County School Board will be requested to help fund the project. The remaining balance required to fund the project will come from a combination of low-interest loans and grants through the U.S. Department of Agriculture Rural Development program.

An itemized preliminary probable project cost estimate for the recommended alternative is provided in Appendix C. This opinion of cost should be considered preliminary in nature and is subject to final design, project, and permitting requirements, in addition to fluctuations in construction, materials, and fuel prices. A detailed break-down of the project funding sources, annual expenditures, and average sewer cost analysis is provided in Appendix D.

## IX. OPERATION AND MAINTENANCE

Daily operations of the Surgoinsville sewer system will require personnel to collect bills, coordinate maintenance, respond to questions and complaints, manage accounts, and perform other services related to the operation of the wastewater system. This can be accomplished with in-house personnel, a contract with a private enterprise, or a contract with a local utility provider such as

**APRIL 6, 2009** 

The following items should be initiated by the Town in order to begin development of their wastewater system:

- Pursue funding of the project by applying for ARC, CDBG, and Rural Development grants and loans.
- Negotiate with the Hawkins County School Board to obtain capital funding for the second phase of the system development.
- Develop an agreement with the Town of Church Hill to discharge the Town's wastewater into their system, and develop a rate structure for treatment.
- Develop a sewer use ordinance detailing connection policy, user fees, pretreatment requirements, and billing procedures.
- Determine whether the system will be operated and maintained using in-house personnel and equipment, by contracting with a private company or contractor, through a contract with Church Hill, or through a contract with the SUD.
- Coordinate with the Surgoinsville Utility District (SUD) to obtain water billing records, or negotiate an agreement with SUD to provide billing of wastewater.

It is recommended that the Town evaluate each of the options available for operation and maintenance of their sewer system, and weigh the advantages and disadvantages of each. Consideration should be given to the initial and long-term costs, regulatory issues, and which option will work best for the Town. The Town should begin negotiations with Church Hill and the SUD as soon as

**APRIL 6, 2009** 

possible on the items listed above in order to successfully implement

development of their sanitary sewer system.

XI. CONCLUSIONS

As previously discussed, the schools of Surgoinsville are in need of a more cost-

effective and dependable wastewater disposal system. A public sanitary sewer

system would allow the Surgoinsville Middle and Elementary Schools to

accommodate increases in their student and staff populations, as well as provide

the infrastructure necessary to meet the Town's wastewater disposal needs. A

public sanitary sewer system would also improve the ground and surface water

quality of the area by eliminating discharges from septic systems and an aging

package wastewater treatment plant.

In order to eliminate the package treatment plant at the schools, a public sanitary

sewer system in the Town of Surgoinsville must be available. The most feasible

means for the Town of Surgoinsville to develop a sanitary sewer system is by

discharging into the Town of Church Hill's existing system. Church Hill has the

capability, without any improvements or upgrades to their system, to provide the

needed sanitary sewer collection and treatment.

The results of this report indicate that the development of a public wastewater

system in the Town of Surgoinsville is feasible based on the phasing of

construction, the availability of project funding through grants and low-interest

loans, and cooperation with the Town of Church Hill. A public sanitary sewer

system for the Town of Surgoinsville would provide a much needed benefit to its

schools and citizens. Additionally, the potential for residential, commercial, and

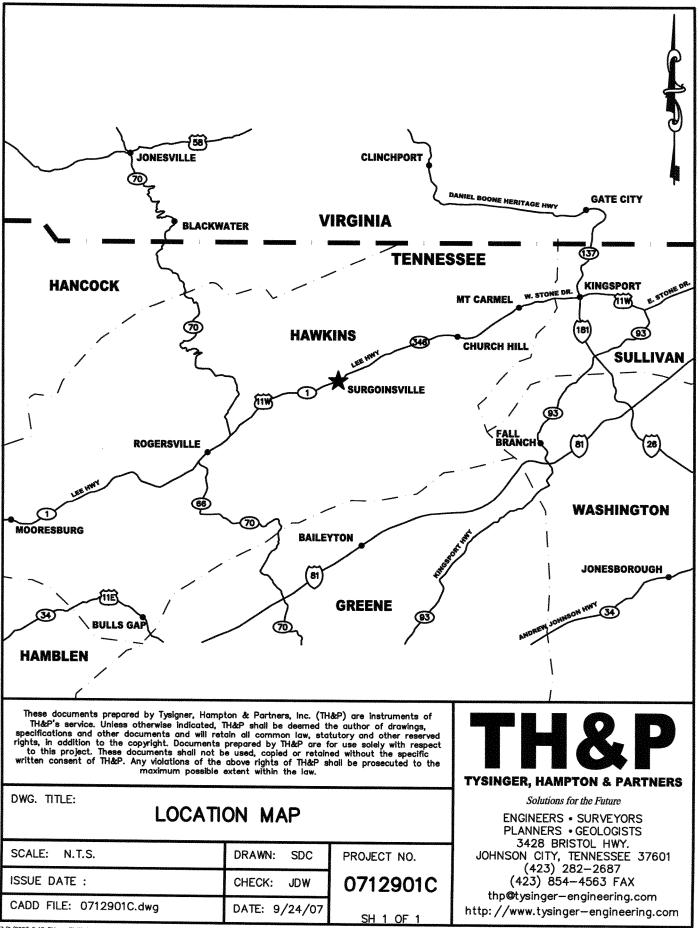
industrial growth in the Town may be realized with the availability of public

sanitary sewer.

## **APPENDIX**

## **APPENDIX A**

**LOCATION MAP** 



## **APPENDIX B**

## SANITARY SEWER SYSTEM DEVELOPMENT ALTERNATIVE MAPS

## **APPENDIX C**

## PRELIMINARY OPINION OF PROBABLE PROJECT COST



## TYSINGER, HAMPTON & PARTNERS, INC.

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P.O. BOX 982 JOHNSON CITY, TENNESSEE 37605-0982 TELEPHONE: (423) 282-2687 www.tysinger-engineering.com 3428 BRISTOL HIGHWAY
JOHNSON CITY, TENNESSEE 37601-1345
FAX: (423) 262-1621
email: thp@tysinger-engineering.com

SURGOINSVILLE SANITARY SEWER SYSTEM DEVELOPMENT TH&P PROJECT NUMBER: 0712901C DATE: 4-6-09

### PRELIMINARY OPINION OF PROBABLE PROJECT COST

#### **ALTERNATIVE #2**

### **CONSTRUCTION COST**

ITEM NO.	DESCRIPTION	UNITS	ESTIMATED QUANTITY	UNIT COST	TOTAL COST	
1	4" FORCE MAIN (PVC SDR 21)	LF	5,000	\$30	\$150,000	
2	6" FORCE MAIN (PVC SDR 21)	LF	20,000	\$35	\$700,000	
3	2" SEWAGE COMBINATION AIR VALVE	EA	6	\$6,000	\$36,000	
4	8" GRAVITY SEWER LINE (PVC SDR 35)	LF	1,300	\$80	\$104,000	
5	4' STANDARD MANHOLE	EA	4	\$5,000	\$20,000	
6	PAVEMENT BREAK & REPLACEMENT FOR FORCEMAIN	TON	2,875	\$200	\$575,000	
7	STONE BASE FOR PAVEMENT REPLACEMENT FOR FORCEMAIN	TON	8,625	\$25	\$215,625	
8	CREEK CROSSING	EA	9	\$4,000	\$36,000	
9	TRAFFIC CONTROL	LS	1	\$15,250	\$15,250	
10	EROSION & SEDIMENT CONTROL	LF	19,500	\$3	\$58,500	
11	SEEDING WITH MULCH	LF	6,150	\$2	\$12,300	
12	DUPLEX SEWER PUMP STATION #1 AT SCHOOLS (INCL. SPARE PUMP, VALVE PIT, SITE GRADING, FENCING, & ELECTRIC SERVICE)	LS	1	\$150,000	\$150,000	
13	DUPLEX SEWER PUMP STATION #2 AT ANDERSON STREET (INCL. SPARE PUMP, VALVE PIT, SITE GRADING, FENCING, & ELECTRIC SERVICE)	LS	1	\$190,000	\$190,000	
	SUBTOTAL =       \$2,262,675         10% CONTINGENCY =       \$226,268         CONSTRUCTION COST TOTAL =       \$2,488,943					

## **ADDITIONAL COSTS**

ITEM NO.	DESCRIPTION	UNITS	ESTIMATED QUANTITY	UNIT COST	TOTAL COST
1	PERMIT FEES	LS	1	\$7,825	\$7,825
2	EASEMENTS/ACQUISITIONS	LS	1	\$18,750	\$18,750
3	APPRAISALS	LS	1	\$12,500	\$12,500
4	LEGAL SERVICES	LS	1	\$25,000	\$25,000
5	ADMINISTRATION	LS	1	\$43,750	\$43,750
6	ENVIRONMENTAL ASSESSMENT	LS	1	\$18,750	\$18,750
7	SURVEYING	LS	1	\$62,500	\$62,500
8	ENGINEERING DESIGN	LS	1	\$174,266	\$174,266
9	PERMIT APPLICATIONS	LS	1	\$32,500	\$32,500
10	CONSTRUCTION SERVICES	LS	1	\$95,000	\$95,000
	SUBTOTAL = \$490,841 10% CONTINGENCY = \$49,084 ADDITIONAL COSTS ESTIMATED TOTAL = \$539,925				

PROJECT CONSTRUCTION COST =

\$2,488,943

ADDITIONAL COSTS =

\$539,925

TOTAL PROJECT COST =

\$3,028,868

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## APPENDIX D

## PROJECT FUNDING AND SEWER COST ANALYSIS



## Tysinger, Hampton & Partners, Inc.

CONSULTING • DESIGN • PROJECT MANAGEMENT

P.O. BOX 982 JOHNSON CITY, TENNESSEE 37605-0982

TELEPHONE: (423) 282-2687 www.tysinger-engineering.com

3428 BRISTOL HIGHWAY JOHNSON CITY, TENNESSEE 37601-1345 FAX: (423) 282-1621

email: thp@tysinger-engineering.com

#### SURGOINSVILLE SANITARY SEWER SYSTEM DEVELOPMENT TH&P PROJECT NUMBER: 0712901C DATE: 4-6-09

(\*REVISED PROJECT FUNDING ON 8-20-09 TO MATCH USDA LETTER DATED 7-30-09)

#### **PROJECT FUNDING & SEWER COST ANALYSIS**

1.	TOTAL PROJECT COST	\$3,030,000	
2.	*PROJECT FUNDING:		
	Appalachian Regional Commision (ARC) Grant =	\$500,000	
	Community Development Block Grant (CDBG) =	\$500,000	
	Hawkins County Government =	\$200,000	
	Community Programs Grant =	\$1,300,000	
	Community Program Loan =	\$530,000	
	Total Project Funding =	\$3,030,000	***************************************
3.	ANNUAL DEBT SERVICE:		
	Principal =	<b>#</b> E20.000	
	Interest Rate =	\$530,000 4.50%	
	Number of Years =	4.50%	
	Equivalent Annual Debt Service =	\$29,363	*******
4.	ANNUAL DEPRECIATION:		
	Total Project Cost =	\$3,030,000	
	Service Life of Sewer System =	φ3,030,000 50	
	Annual Depreciation Value =	\$60,600	***********
5.	ANNUAL LINE MAINTENANCE:		
Э.	ANNOAL LINE MAINTENANCE:		
Э.		\$0.10	
Э.	Annual Maintenance Cost Per Linear Foot of Pipe =	\$0.10 26.300	
3.		\$0.10 26,300 <b>\$2,630.00</b>	
6.	Annual Maintenance Cost Per Linear Foot of Pipe = Linear Feet of Pipe =	26,300	<b>S</b>
	Annual Maintenance Cost Per Linear Foot of Pipe =  Linear Feet of Pipe =  Annual Line Maintenance Cost =  ANNUAL TREATMENT COST:	26,300 <b>\$2,630.00</b>	<b>2</b> -2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-
	Annual Maintenance Cost Per Linear Foot of Pipe = Linear Feet of Pipe = Annual Line Maintenance Cost =  ANNUAL TREATMENT COST:  Average Daily Wastewater Discharge (GPD) =	26,300 <b>\$2,630.00</b> 17,484	
	Annual Maintenance Cost Per Linear Foot of Pipe = Linear Feet of Pipe = Annual Line Maintenance Cost =  ANNUAL TREATMENT COST:  Average Daily Wastewater Discharge (GPD) = Average Monthly Wastewater Discharge (Gal/Month) =	26,300 <b>\$2,630.00</b> 17,484 531,810	
	Annual Maintenance Cost Per Linear Foot of Pipe = Linear Feet of Pipe =  Annual Line Maintenance Cost =  ANNUAL TREATMENT COST:  Average Daily Wastewater Discharge (GPD) = Average Monthly Wastewater Discharge (Gal/Month) = Treatment Cost per 1,000 Gal/Month =	26,300 \$2,630.00 17,484 531,810 \$3.58	
	Annual Maintenance Cost Per Linear Foot of Pipe = Linear Feet of Pipe =  Annual Line Maintenance Cost =  ANNUAL TREATMENT COST:  Average Daily Wastewater Discharge (GPD) = Average Monthly Wastewater Discharge (Gal/Month) = Treatment Cost per 1,000 Gal/Month = Average Monthly Treatment Cost =	26,300 \$2,630.00 17,484 531,810 \$3.58 \$1,903.88	
	Annual Maintenance Cost Per Linear Foot of Pipe = Linear Feet of Pipe =  Annual Line Maintenance Cost =  ANNUAL TREATMENT COST:  Average Daily Wastewater Discharge (GPD) = Average Monthly Wastewater Discharge (Gal/Month) = Treatment Cost per 1,000 Gal/Month =	26,300 \$2,630.00 17,484 531,810 \$3.58	
6.	Annual Maintenance Cost Per Linear Foot of Pipe = Linear Feet of Pipe =  Annual Line Maintenance Cost =  ANNUAL TREATMENT COST:  Average Daily Wastewater Discharge (GPD) = Average Monthly Wastewater Discharge (Gal/Month) = Treatment Cost per 1,000 Gal/Month = Average Monthly Treatment Cost = Average Daily Treatment Cost = Average Annual Treatment Cost =	26,300 \$2,630.00 17,484 531,810 \$3.58 \$1,903.88 \$62.59 \$22,846.56	
	Annual Maintenance Cost Per Linear Foot of Pipe = Linear Feet of Pipe =  Annual Line Maintenance Cost =  ANNUAL TREATMENT COST:  Average Daily Wastewater Discharge (GPD) = Average Monthly Wastewater Discharge (Gal/Month) = Treatment Cost per 1,000 Gal/Month = Average Monthly Treatment Cost = Average Daily Treatment Cost =	26,300 \$2,630.00 17,484 531,810 \$3.58 \$1,903.88 \$62.59	
6.	Annual Maintenance Cost Per Linear Foot of Pipe = Linear Feet of Pipe =  Annual Line Maintenance Cost =  ANNUAL TREATMENT COST:  Average Daily Wastewater Discharge (GPD) = Average Monthly Wastewater Discharge (Gal/Month) = Treatment Cost per 1,000 Gal/Month = Average Monthly Treatment Cost = Average Daily Treatment Cost = Average Annual Treatment Cost =	26,300 \$2,630.00 17,484 531,810 \$3.58 \$1,903.88 \$62.59 \$22,846.56	

### 10. PROJECTED DEMAND:

## SCHOOL DEMAND

Average Daily Middle School Usage (GPD) =	937
Average Daily Elementary School Usage (GPD) =  Total Average Daily School Demand (GPD) =	4,547 <b>5,484</b>
,	-,,
FUTURE RESIDENTIAL DEMAND <sup>2</sup>	
Average Number of Homes =	40
Population Density (People per Home) =	3
Average Daily Usage (Gallons per Day per Person) =	100
Total Average Daily Residental Demand (GPD) =	12,000
Total Projected Demand from Users (GPD) =	17,484
SEWER COST CALCULATION:	
Average Sewer Expenses per Year =	\$71,039
Average Sewer Expenses per Month =	\$5,920
Average Sewer Expenses per Day =	\$195
Average Daily Demand (GPD) =	17,484
Total Sewer Cost per Gallon =	\$0.011
PORTION OF SEWER COST TO TOWN:	
Annual Debt Service =	\$29,363
Annual Depreciation 1 =  Total Annual Cost to Town =	\$0
I DIAL ANNUAL LOST TO LOWN =	\$29,362.90
Total yalliadi oost to fown	
Total Monthly Cost to Town =	\$2,446.91
	\$2,446.91 \$80.45
Total Monthly Cost to Town =	
Total Monthly Cost to Town =  Total Daily Cost to Town =	
Total Monthly Cost to Town = Total Daily Cost to Town = PORTION OF SEWER COST TO USERS:	\$80.45
Total Monthly Cost to Town = Total Daily Cost to Town =  PORTION OF SEWER COST TO USERS:  Annual Line Maintenance Cost = Average Annual Treatment Cost = Annual Pump Station Maintenance =	\$80.45 \$2,630
Total Monthly Cost to Town = Total Daily Cost to Town =  PORTION OF SEWER COST TO USERS:  Annual Line Maintenance Cost = Average Annual Treatment Cost = Annual Pump Station Maintenance = Annual Administration =	\$80.45 \$2,630 \$22,847
Total Monthly Cost to Town = Total Daily Cost to Town =  PORTION OF SEWER COST TO USERS:  Annual Line Maintenance Cost = Average Annual Treatment Cost = Annual Pump Station Maintenance =	\$80.45 \$2,630 \$22,847 \$15,000
Total Monthly Cost to Town = Total Daily Cost to Town =  PORTION OF SEWER COST TO USERS:  Annual Line Maintenance Cost = Average Annual Treatment Cost = Annual Pump Station Maintenance = Annual Administration =  Total Annual Cost to Users =  Average Sewer Cost per Month to Users =	\$2,630 \$22,847 \$15,000 \$1,200
Total Monthly Cost to Town = Total Daily Cost to Town =  PORTION OF SEWER COST TO USERS:  Annual Line Maintenance Cost = Average Annual Treatment Cost = Annual Pump Station Maintenance = Annual Administration =  Total Annual Cost to Users =  Average Sewer Cost per Month to Users = Average Sewer Cost per Day =	\$2,630 \$22,847 \$15,000 \$1,200 \$41,677
Total Monthly Cost to Town = Total Daily Cost to Town = Total Daily Cost to Town =  PORTION OF SEWER COST TO USERS:  Annual Line Maintenance Cost = Average Annual Treatment Cost = Annual Pump Station Maintenance = Annual Administration =  Total Annual Cost to Users =  Average Sewer Cost per Month to Users = Average Sewer Cost per Day = Total Average Daily Demand (GPD) =	\$2,630 \$22,847 \$15,000 \$1,200 \$41,677
Total Monthly Cost to Town = Total Daily Cost to Town =  PORTION OF SEWER COST TO USERS:  Annual Line Maintenance Cost = Average Annual Treatment Cost = Annual Pump Station Maintenance = Annual Administration =  Total Annual Cost to Users =  Average Sewer Cost per Month to Users = Average Sewer Cost per Day =	\$2,630 \$22,847 \$15,000 \$1,200 \$41,677 \$3,473 \$114
Total Monthly Cost to Town = Total Daily Cost to Town = Total Daily Cost to Town =  PORTION OF SEWER COST TO USERS:  Annual Line Maintenance Cost = Average Annual Treatment Cost = Annual Pump Station Maintenance = Annual Administration =  Total Annual Cost to Users =  Average Sewer Cost per Month to Users = Average Sewer Cost per Day = Total Average Daily Demand (GPD) =	\$2,630 \$22,847 \$15,000 \$1,200 <b>\$41,677</b> \$3,473 \$114 17,484
Total Monthly Cost to Town = Total Daily Cost to Town =  PORTION OF SEWER COST TO USERS:  Annual Line Maintenance Cost = Average Annual Treatment Cost = Annual Pump Station Maintenance = Annual Administration =  Total Annual Cost to Users =  Average Sewer Cost per Month to Users = Average Sewer Cost per Day = Total Average Daily Demand (GPD) =  Sewer Cost per Gallon to Users =	\$2,630 \$22,847 \$15,000 \$1,200 <b>\$41,677</b> \$3,473 \$114 17,484
Total Monthly Cost to Town = Total Daily Cost to Town =  PORTION OF SEWER COST TO USERS:  Annual Line Maintenance Cost = Average Annual Treatment Cost = Annual Pump Station Maintenance = Annual Administration =  Total Annual Cost to Users =  Average Sewer Cost per Month to Users = Average Sewer Cost per Day = Total Average Daily Demand (GPD) =  Sewer Cost per Gallon to Users =	\$2,630 \$22,847 \$15,000 \$1,200 \$41,677 \$3,473 \$114 17,484 \$0.007
Total Monthly Cost to Town = Total Daily Cost to Town = Total Daily Cost to Town =  PORTION OF SEWER COST TO USERS:  Annual Line Maintenance Cost = Average Annual Treatment Cost = Annual Pump Station Maintenance = Annual Administration =  Total Annual Cost to Users =  Average Sewer Cost per Month to Users = Average Sewer Cost per Day = Total Average Daily Demand (GPD) =  Sewer Cost per Gallon to Users =  PROJECTED REVENUE:  Sewer Rate per Gallon =	\$2,630 \$22,847 \$15,000 \$1,200 \$41,677 \$3,473 \$114 17,484 \$0.007
Total Monthly Cost to Town = Total Daily Cost to Town = Total Daily Cost to Town =  PORTION OF SEWER COST TO USERS:  Annual Line Maintenance Cost = Average Annual Treatment Cost = Annual Pump Station Maintenance = Annual Administration =  Total Annual Cost to Users =  Average Sewer Cost per Month to Users = Average Sewer Cost per Day = Total Average Daily Demand (GPD) =  Sewer Cost per Gallon to Users =  PROJECTED REVENUE:  Sewer Rate per Gallon = Sewer Rate per 1,000 Gallons =  Average Daily School Demand (GPD) = Average Daily Revenue from Schools =	\$2,630 \$22,847 \$15,000 \$1,200 \$41,677 \$3,473 \$114 17,484 \$0.007
Total Monthly Cost to Town = Total Daily Cost to Town = Total Daily Cost to Town =  PORTION OF SEWER COST TO USERS:  Annual Line Maintenance Cost = Average Annual Treatment Cost = Annual Pump Station Maintenance = Annual Administration =  Total Annual Cost to Users =  Average Sewer Cost per Month to Users = Average Sewer Cost per Day = Total Average Daily Demand (GPD) =  Sewer Cost per Gallon to Users =  PROJECTED REVENUE:  Sewer Rate per Gallon = Sewer Rate per 1,000 Gallons =  Average Daily School Demand (GPD) = Average Daily Revenue from Schools = Average Monthly Revenue from Schools =	\$2,630 \$22,847 \$15,000 \$1,200 \$41,677 \$3,473 \$114 17,484 \$0.007
Total Monthly Cost to Town = Total Daily Cost to Town = Total Daily Cost to Town =  PORTION OF SEWER COST TO USERS:  Annual Line Maintenance Cost = Average Annual Treatment Cost = Annual Pump Station Maintenance = Annual Administration =  Total Annual Cost to Users =  Average Sewer Cost per Month to Users = Average Sewer Cost per Day = Total Average Daily Demand (GPD) =  Sewer Cost per Gallon to Users =  PROJECTED REVENUE:  Sewer Rate per Gallon = Sewer Rate per 1,000 Gallons =  Average Daily School Demand (GPD) = Average Daily Revenue from Schools =	\$2,630 \$22,847 \$15,000 \$1,200 \$41,677 \$3,473 \$114 17,484 \$0.007 \$6.53 5,484 \$35.81
Total Monthly Cost to Town = Total Daily Cost to Town = Total Daily Cost to Town =  PORTION OF SEWER COST TO USERS:  Annual Line Maintenance Cost = Average Annual Treatment Cost = Annual Pump Station Maintenance = Annual Administration =  Total Annual Cost to Users =  Average Sewer Cost per Month to Users = Average Sewer Cost per Day = Total Average Daily Demand (GPD) =  Sewer Cost per Gallon to Users =  PROJECTED REVENUE:  Sewer Rate per Gallon = Sewer Rate per 1,000 Gallons =  Average Daily School Demand (GPD) = Average Daily Revenue from Schools = Average Annual Revenue from Schools = Average Daily Residential Demand (GPD) =	\$2,630 \$22,847 \$15,000 \$1,200 \$41,677 \$3,473 \$114 17,484 \$0.007 \$6.53 5,484 \$35.81 \$1,089.37 \$13,072.46
Total Monthly Cost to Town = Total Daily Cost to Town = Total Daily Cost to Town =  PORTION OF SEWER COST TO USERS:  Annual Line Maintenance Cost = Average Annual Treatment Cost = Annual Pump Station Maintenance = Annual Administration = Total Annual Cost to Users =  Average Sewer Cost per Month to Users = Average Sewer Cost per Day = Total Average Daily Demand (GPD) = Sewer Cost per Gallon to Users =  PROJECTED REVENUE:  Sewer Rate per Gallon = Sewer Rate per 1,000 Gallons =  Average Daily School Demand (GPD) = Average Daily Revenue from Schools = Average Monthly Revenue from Schools = Average Annual Revenue from Schools = Average Daily Residential Demand (GPD) = Average Daily Residential Demand (GPD) = Average Daily Residential Demand (GPD) = Average Daily Revenue from Residential=	\$2,630 \$22,847 \$15,000 \$1,200 \$41,677 \$3,473 \$114 17,484 \$0.007 \$6.53 5,484 \$35.81 \$1,089.37 \$13,072.46
Total Monthly Cost to Town = Total Daily Cost to Town = Total Daily Cost to Town =  PORTION OF SEWER COST TO USERS:  Annual Line Maintenance Cost = Average Annual Treatment Cost = Annual Pump Station Maintenance = Annual Administration =  Total Annual Cost to Users =  Average Sewer Cost per Month to Users = Average Sewer Cost per Day = Total Average Daily Demand (GPD) =  Sewer Cost per Gallon to Users =  PROJECTED REVENUE:  Sewer Rate per 1,000 Gallons =  Average Daily School Demand (GPD) = Average Daily Revenue from Schools = Average Monthly Revenue from Schools =  Average Daily Residential Demand (GPD) = Average Daily Residential Demand (GPD) = Average Daily Revenue from Residential = Average Monthly Revenue from Residential = Average Monthly Revenue from Residential =	\$2,630 \$22,847 \$15,000 \$1,200 \$41,677 \$3,473 \$114 17,484 \$0.007 \$6.53 5,484 \$35.81 \$1,089.37 \$13,072.46
Total Monthly Cost to Town = Total Daily Cost to Town = Total Daily Cost to Town =  PORTION OF SEWER COST TO USERS:  Annual Line Maintenance Cost = Average Annual Treatment Cost = Annual Pump Station Maintenance = Annual Administration = Total Annual Cost to Users =  Average Sewer Cost per Month to Users = Average Sewer Cost per Day = Total Average Daily Demand (GPD) = Sewer Cost per Gallon to Users =  PROJECTED REVENUE:  Sewer Rate per Gallon = Sewer Rate per 1,000 Gallons =  Average Daily School Demand (GPD) = Average Daily Revenue from Schools = Average Monthly Revenue from Schools = Average Annual Revenue from Schools = Average Daily Residential Demand (GPD) = Average Daily Residential Demand (GPD) = Average Daily Residential Demand (GPD) = Average Daily Revenue from Residential=	\$2,630 \$22,847 \$15,000 \$1,200 \$41,677 \$3,473 \$114 17,484 \$0.007 \$6.53 5,484 \$35.81 \$1,089.37 \$13,072.46

#### **AVERAGE MONTHLY BILLING:**

	Total =	\$71,039.45
	Annual Revenue from Users =	\$41,676.56
	Annual Expenses Paid by Town =	\$29,362.90
	Average Annual Expenses <sup>1</sup> =	\$71,039.45
13.	EXPENSES VS. REVENUE:	
	Average Monthly Residential Sewer Bill =	\$59.59
	Average Monthly Elementary School Sewer Bill =	\$903.25
	Average Monthly Middle School Sewer Bill =	\$186.12

### NOTES:

- Annual Depreciation will be deferred for the first 5 years and is not included in the Annual Expenses calculation.
- Future Residential Demand is based on the assumption that 1-year after the sewer line is active, approximately 40 single-family residential homes will be able to discharge into the sanitary sewer.

Town/Utility District of
-
Schedule of Unaccounted For Water

## Enter Month and or Year here

(All amounts in gallons)

A	Water Treated and Purchased:		
В	Water Pumped (potable)	0	
$\mathbf{C}$	Water Purchased	0	
D	Total Water Treated and Purchased	**************************************	0
	(Sum Lines B and C)	<del>-</del>	
$\mathbf{E}$	Accounted for Water:		
F	Water Sold	0	
G	Metered for Consumption (in house usage)	0	
H	Fire Department(s) Usage	0	
I	Flushing	0	
J	Tank Cleaning/Filling	0	
K	Street Cleaning	0	
L	Bulk Sales	0	
M	Water Bill Adjustments	0	
N	Total Accounted for Water		0
	(Sum Lines F thru M)		*** **********************************
O	Unaccounted for Water		0
	(Line D minus Line N)		
P	Percent Unaccounted for Water		0
	(Line O divided by Line D times 100)		
	•		
Λ	Other (evaluin)	C D 1	
Q	Other (explain)	See Below	
Exr	plain Other:		
	num Other.		

All amounts included in this schedule are supported by documentation on file at the water system. If no support is on file for a line item or if the line item is not applicable, a "0" is shown.

JURISDICTION LIST OF THE WATER AND WASTEWATER FINANCING BOARD 11/12/09	ER AND WASTEWAT	ER FINANCING	BOARD 11/12/09
			LAST BD
SYSTEM	COUNTY	LAST AUDIT	APPEARANCE
City of Bells	Crockett	2008	Nov-08
City of Bolivar	Hardeman	2008	Nov-08
Town of Bulls Gap	Greene	2008	Sep-09
Town of Decaturville	Decatur	2008	Nov-09
Duck River Utilities Commission	Coffee	2008	Jan-08
City of Friendship	Crockett	2008	60-voN
Town of Gibson	Gibson	2008	Sep-09
City of Milan	Gibson	2008	Sep-09
City of Millington	Shelby	2008	60-deS
City of Paris	Henry	2009	60-voN
Town of Toone	Hardeman	2008	60-voN
Town of Vonore	Blount/Monroe	2008	Sep-09
City of Whitwell	Marion	2008	Mar-10